



CALSTEST NETWORK

AFCTN Test Report 94-013

AFCTB-ID
93-023



Technical Publication Transfer

Using:



Northrop Corporation's Data



MIL-D-2800A (IGES)
MIL-M-28001A (SGML)
MIL-R-28002A (Raster)
MIL-D-28003 (CGM)



19960822 049



Quick Short Test Report

17 March 1993



Prepared for

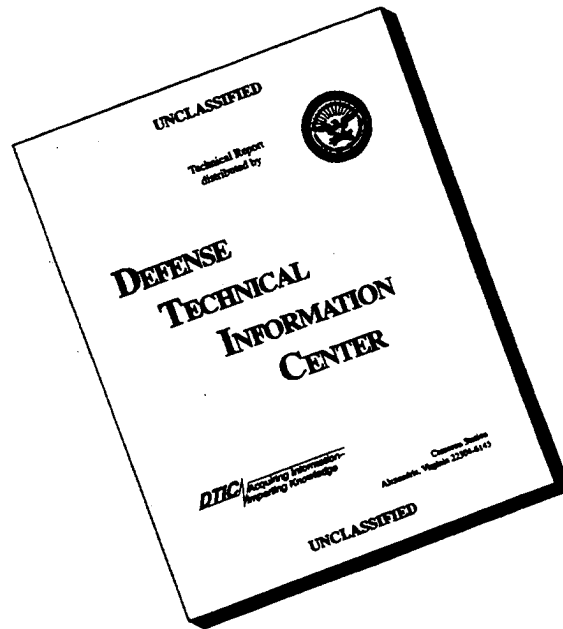
Electronic Systems Center

DTIC QUALITY INSPECTED 3

DISTRIBUTION STATEMENT A

Approved for public release;
Distribution Unlimited

DISCLAIMER NOTICE



THIS DOCUMENT IS BEST QUALITY AVAILABLE. THE COPY FURNISHED TO DTIC CONTAINED A SIGNIFICANT NUMBER OF PAGES WHICH DO NOT REPRODUCE LEGIBLY.

**Technical Publication Transfer
Using:
Northrop Corporation's Data**

**MIL-D-28000A (IGES)
MIL-M-28001A (SGML)
MIL-R-28002A (Raster)
MIL-D-28003 (CGM)**

Quick Short Test Report

17 March 1993

Prepared By

Air Force CALS Test Bed
Wright-Patterson AFB, OH 45433

AFCTB Contact

Gary Lammers
(513) 427-2295

AFCTN Contact

Mel Lammers
(513) 427-2295

DISCLAIMER

This document was prepared as an account of work sponsored by the Air Force. Neither the United States Government, the Air Force, nor any of their employees makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, nor represents that its use would not infringe on privately owned rights. Reference herein to any specific commercial products, process, or service by trade name, trademark, manufacturer, or otherwise, does not necessarily constitute or imply its endorsement, recommendation, or favoring by the United States Government or the Air Force. The views and opinions of authors expressed herein do not necessarily state or reflect those of the United States Government or the Air Force, and shall not be used for advertising or product endorsement purposes.

Available to the public from the
National Technical Information Service
U.S. Department of Commerce
5285 Port Royal Road
Springfield, VA 22161

This report and those involved in its preparation do not endorse any product, process, or company stated herein. Use of these means by anyone does not imply certification by the Air Force CALS Test Network (AFCTN).

Contents

1.	Introduction.....	1
1.1.	Background.....	1
1.2.	Purpose.....	2
2.	Test Parameters.....	3
3.	1840A Analysis.....	6
3.1.	External Packaging.....	6
3.2.	Transmission Envelope.....	6
3.2.1.	Tape Formats.....	6
3.2.2.	Declaration and Header Fields.....	6
4.	IGES Analysis.....	7
5.	SGML Analysis.....	8
6.	Raster Analysis.....	9
7.	CGM Analysis.....	9
8.	Conclusions and Recommendations.....	11
9.	Appendix A - Tapetool Report Logs.....	12
9.1.	Tape Catalog.....	12
9.2.	Tape Evaluation Log.....	13
9.3.	Tape File Set Validation Log.....	18
10.	Appendix B - Detailed IGES Analysis.....	22
10.1.	File D001Q004.....	22
10.1.1.	Parser/Verifier Log.....	22
10.1.2.	Output Cadkey v5.02.....	27
10.1.3.	Output IGESView.....	28

10.1.4. Output IGESWorks.....	29
10.2. File D001Q005.....	30
10.2.1. Parser/Verifier Log.....	30
10.2.2. Output Cadkey v5.02.....	35
10.2.3. Output IGESView.....	36
10.2.4. Output IGESWorks.....	37
10.3. File D001Q006.....	38
10.3.1. Parser/Verifier Log.....	38
10.3.2. Output Cadkey v5.02.....	43
10.3.3. Output IGESView.....	44
10.3.4. Output IGESWorks.....	45
10.4. File D001Q007.....	46
10.4.1. Parser/Verifier Log.....	46
10.4.2. Output Cadkey v5.02.....	51
10.4.3. Output IGESView.....	52
10.4.4. Output IGESWorks.....	53
11. Appendix C - Detailed SGML Analysis.....	54
11.1. Parser Log.....	54
11.1.1. DTD Log.....	54
11.1.2. Text Log.....	54
11.2. Exoterica Parser.....	55
11.2.1. DTD Log.....	55
11.2.2. Text Log.....	55
11.2.2.1. First Pass.....	55
11.2.2.2. Second Pass.....	57

12.	Appendix D - Detailed Raster Analysis.....	58
12.1.	File D001R009.....	58
12.1.1.	Error Log validg4.....	58
12.1.2.	Output g42tiff/IslandPaint.....	59
12.1.3.	Output IGESView.....	60
13.	Appendix E - Detailed CGM Analysis.....	61
13.1.	File D001C008.....	61
13.1.1.	Parser Log MetaCheck.....	61
13.1.2.	validcgm Log.....	62
13.1.3.	Output Harvard Graphics.....	64
13.1.4.	Output cgm2draw/IslandDraw.....	65
13.1.5.	Output CADleaf.....	66

1. Introduction

1.1 Background

The Department of Defense (DoD) Air Force Continuous Acquisition and Life-Cycle Support (CALS) Test Network (AFCTN) is conducting tests of the military standard for the Automated Interchange of Technical Information, MIL-STD-1480A, and its companion suite of military specifications. The AFCTN is a DoD sponsored confederation of voluntary participants from industry and government managed by the Electronic Systems Center (ESC).

The primary objective of the AFCTN is to evaluate the effectiveness of the CALS standards for technical data interchange and to demonstrate the technical capabilities and operational suitability of those standards. Two general categories of tests are performed to evaluate the standards; formal and informal.

Formal tests are large and comprehensive, which follow a written test plan, require specific authorization from the DoD, and may take months to prepare, execute, and report.

Informal tests are quick and short, used by the AFCTN technical staff, to broaden the testing base. They include representative samples of the many systems and applications used by AFCTN participants. They also allow the AFCTN staff to gain feedback from many industry and government interpretations of the standards, to increase the base of participation in the CALS initiative, and respond to the many requests for help that come from participants. Participants take part voluntarily, benefit by receiving an evaluation of their latest implementation (interpretation) of the standards, interact with the AFCTN technical staff, gain experience using the standards, and develop increased confidence in them. The results of informal tests are reported in Quick Short Test Reports (QSTRs) that briefly summarize the standard(s) tested, the hardware and software used, the nature of the test, and the results.

1.2 Purpose

The purpose of the informal test, reported in this QSTR, was to analyze Northrop Corporation's interpretation and use of the CALS standards in transferring technical publication data. Northrop used its CALS Technical Data Interchange System to produce data, in accordance with the standards, and delivered it to the AFCTN technical staff on a 9-track magnetic tape.

2. Test Parameters

Test Plan: AFCTB 93-023

Date of
Evaluation: 17 March 1993

Evaluator: George Elwood
Air Force CALS Test Bed
DET 2 HQ ESC/AV-2P
4027 Colonel Glenn Hwy
Suite 300
Dayton OH 45431-1672

Data
Originator: John P. Kent
Northrop Corporation
B-2 Division
L591/GK
8900 E. Washington Blvd
Pico Rivera CA 90660-3765
(310) 948-0624

Data
Description: Technical Manual Test
1 Document Declaration file
1 Document Type Definition (DTD)
4 Initial Graphics Exchange Specification
(IGES) files
1 Text/Standard Generalized Markup Language
(SGML) file
1 Raster file
1 Computer Graphics Metafile (CGM) file
1 Format Output Specification Instance (FOSI)

Data
Source System:

IGES

HARDWARE

Unknown

SOFTWARE

ITDS CONVERTER: GFF-IGES

Text/SGML	HARDWARE	Unknown
	SOFTWARE	Unknown
Raster	HARDWARE	Unknown
	SOFTWARE	Unknown
CGM	HARDWARE	Unknown
	SOFTWARE	ITDS GEF

Evaluation Tools Used:

MIL-STD-1840A (TAPE)

SUN 3/280

AFCTN Tapetool v1.2.8 UNIX

XSoft CAPS/CALS v40.4

MIL-D-28000 (IGES)

Sun SparcStation 2

ArborText iges2draw

IGES Data Analysis (IDA) Parser/Verifier v92

IDA IGESView v3.05

International TechneGroup Incorporated
(ITI) IGES/Works v1.3

Cheetah Gold 486

Cadkey Cadkey v5.02

MIL-M-28001 (SGML)

Cheetah Gold 486

Exoterica XGMLNormalizer v1.2e3.2

McAfee & McAdam Sema Mark-it v2.2.2

Public Domain sgmls

MIL-R-28002 (Raster)

SUN SparcStation 2

ArborText g42tiff

AFCTN validg4

AFCTN calstb.475

IDA IGESView v3.0

Island Graphics IslandPaint v3.0

MIL-D-28003 (CGM)

SUN SparcStation 2

ArborText *cgm2draw*

Island Graphics *IslandDraw v3.0*

Cheetah Gold 486

Advance Technology Center

(ATC) *MetaView R 1.12*

ATC *MetaCheck R 2.05*

Software Publishing Corporation

(SPC) *Harvard Graphics v3.05*

Corel Ventura Publisher

Standards

Tested:

MIL-STD-1840A

MIL-D-28000A

MIL-M-28001A

MIL-R-28002A

MIL-D-28003

3. 1840A Analysis

3.1 External Packaging

The tape arrived at the Air Force CALS Test Bed (AFCTB) enclosed in a box in accordance with ASTM D 3951. The exterior of the box was marked with the magnetic tape warning label, as required by MIL-STD-1840A, para. 5.3.1.3.

The tape was not enclosed in a barrier bag as required by MIL-STD-1840A, para. 5.3.1.2. Inspection of the tape reel showed the label indicating the recording density, as required by MIL-STD-1840A, para. 5.3.1. Enclosed in the box was a packing list showing all files recorded on the tape.

3.2 Transmission Envelope

The 9-track tape received by the AFCTB contained MIL-STD-1840A files. The files were named per the standard conventions.

3.2.1 Tape Formats

The tape was run through the AFCTN *Tapetool* v1.2.8 utility. No errors were encountered while evaluating the contents of the tape labels.

The tape was read without a reported problem using XSoft's *CAPS read1840A*.

3.2.2 Declaration and Header Fields

No errors were found in the Document Declaration file or data file headers.

The physical structure of the tape meets the CALS MIL-STD-1840A requirements.

4. IGES Analysis

The tape contained four IGES files. These files were evaluated using IDA's *Parser* and *Verifier* set for the CALS Class I standard. This utility reported that all four files meet the CALS Class I standard. This utility reported all four files as having basic IGES discrepancies. These consisted of line weight and misplaced points. See the log files in the Appendix for details.

The AFCTB has several tools for viewing IGES files. These tools are not used to generate a pass/fail but to report how commercially available software can handle the files. Many of these products are used in the development of technical publications and are good indicators of usability. The use of these products is not an endorsement nor an indication of CALS capability. All operations were performed using the default settings.

The files were converted using Cadkey's *ig2c* utility with no reported errors. The resulting files were read into Cadkey's *Cadkey*, displayed, and printed. The images appear to be complete.

The files were converted using ArborText's *iges2draw* utility with no reported errors. The resulting files were read into Island Graphics' *IslandDraw*. Nothing was displayed on the screen. This problem has been forwarded to ArborText for their action.

The files were read into IDA's *IGESView*, displayed and printed without a problem. The images appear to be complete.

The files were read into ITI's *IGESWorks*, displayed and printed without a reported error. The images appear to be complete.

The IGES files meet the CALS MIL-D-28000A specification.

5. SGML Analysis

The first pass through the document using Exoterica's *XGML-Normalizer* parser generated two errors. The first error was the use of a public entity set that was not defined in MIL-M-28002A and not available in the AFCTB. This statement was commented out. Use of a nonstandard entity set should be avoided. If used, they must be included with the document.

```
<!ENTITY % PUBspc PUBLIC "ISO 8879-1986//ENTITIES Tech Pubs Special  
Characters//EN">
```

The parser also reported an ambiguous content model.

```
C:\XGML\XGMLNORM.EXE -- Error on line 466 in file  
entities/93222.dtd:  
A content model is ambiguous.  
For element 'TOC'.  
The input is 'CONTENTSENTRY'.  
<!-- The document prolog is in error. -->
```

The element on the defined line had contentsentry on the line twice. When the line was changed to reflect only one, no errors were reported.

```
<!ELEMENT toc          - o (contentsentry*,contents?,table?) >  
<!-- line above replacing below  
<!ELEMENT toc          - o  
(contentsentry*,contents?,table?,contentsentry*) > -->
```

When the text file was parsed using the contentsentry at the end of the string, five errors were reported. When the contentsentry was moved to the front of the string, one error was reported.

The Public Domain *sgmls* and McAfee & McAdam's *Sema Mark-it* parsers also reported similar errors.

The basic DTD with the only non-standard reference commented out was parsed using another parser available within the AFCTB with no reported errors. The Text file also parsed without a reported error.

The DTDs and Text files do not meet the CALS MIL-M-28001A specification.

6. Raster Analysis

The tape included one type I Raster file. This file was evaluated using the AFCTN *validg4* utility which reported the file was bad.

When an attempt to read the file using the AFCTN *calstb.475*, a Raster viewer, a core dump resulted.

The AFCTB has several tools for viewing Raster files. These tools are not used to generate a pass/fail but to report how commercially available software can handle the files. Many of these products are used in the development of technical publications and are good indicators of usability. The use of these products is not an endorsement nor an indication of CALS capability. All operations were performed using the default settings.

The file was read into IDA's *IGESView* without a reported error. The image generated consisted of random lines.

The file was converted using ArborText's *g42tiff* utility without a reported error. The resulting file was then read into Island Graphics' *IslandPaint*. The image consisted of random lines.

The Raster file does not meet the CALS MIL-R-28002A specification.

7. CGM Analysis

The tape included one CGM file. This file was evaluated using ATC's *MetaCheck* with CALS options. This utility, which is not the most current version, reported the file as meeting the CALS MIL-D-28003 specification.

The file was evaluated using the AFCTN beta *validcgm* utility, which reported two errors.

The AFCTB has several tools for viewing CGM files. These tools are not used to generate a pass/fail but to report how

commercially available software can handle the files. Many of these products are used in the development of technical publications and are good indicators of usability. The use of these products is not an endorsement nor an indication of CALS capability. All operations were performed using the default settings.

ATC's *MetaView* displayed the image with font problems and a reported error.

The file was converted using ArborText's *cgm2draw* utility without a reported error. The resulting file was read into Island Graphics' *IslandDraw*, displayed and printed. The image appeared complete and usable.

The file was imported directly into Island Graphics' *IslandDraw*. The result was many lines displayed along the top of the screen.

The file was imported into SPC's *Harvard Graphics 3.05* with two errors; line style and non-translated entities. The resulting image consisted of random lines on the screen.

When an attempt to import the file into Corel's *Ventura Publisher* it resulted in a message indicating that the file was not a valid CGM file.

The CGM file was reported as meeting the CALS MIL-D-28003 specification.

8. Conclusions and Recommendations

In summary, the tape from Northrop Corporation was correct. It could be read using available tools in the AFCTB without any reported errors. The physical structure of the tape meets the CALS MIL-STD-1840A requirements.

The included IGES files meet the CALS MIL-D-28000A specification.

The included DTD and Text files had reported errors and do not meet the CALS MIL-M-28001A specification.

The included Raster file was not acceptable and does not meet the CALS MIL-R-28002A specification.

The CGM file was reported as meeting the CALS MIL-D-28003 specification.

The tape, because of errors in the DTD, Text, and Raster files does not meet the CALS MIL-STD-1840A requirements.

9. Appendix A - Tapetool Report Logs

9.1 Tape Catalog

Air Force CALS Test Network Catalog Evaluation - Version 1.2; Release Number 8

Standards referenced:

MIL-STD-1840A (1987) - Automated Interchange of Technical Information

ANSI X3.27 (1987) - File Structure and labeling of Magnetic Tapes
for Information Interchange

ANSI X3.4 (1986) - Coded Character Sets - 7 Bit ASCII

Tue Mar 16 11:28:44 1993

MIL-STD-1840A File Catalog

File Set Directory: /cals/tapetool8/Set073

Page: 1

File Name	File Type	Record Format/ Length	Block Length/Total	Selected/ Extracted
D001	Document Declaration	D/00260	02048/000001	Extracted
D001T001	Text	D/00260	02048/000009	Extracted
D001G002	DTD	D/00260	02048/000010	Extracted
D001H003	Output Specification	D/00260	02048/000051	Extracted
D001Q004	IGES	F/00080	02000/000281	Extracted
D001Q005	IGES	F/00080	02000/000138	Extracted
D001Q006	IGES	F/00080	02000/000224	Extracted
D001Q007	IGES	F/00080	02000/000224	Extracted
D001C008	CGM	F/00080	00800/000062	Extracted
D001R009	Raster	F/00128	02048/000005	Extracted

Catalog Process terminated normally.

9.2 Tape Evaluation Log

ir Force CALS Test Network Tape Evaluation - Version 1.2; Release Number 8

Standards referenced:

ANSI X3.27 (1987) - File Structure and labeling of Magnetic Tapes
for Information Interchange

ANSI X3.4 (1986) - Coded Character Sets - 7 Bit ASCII

Tue Mar 16 11:27:55 1993

ANSI Tape Import Log

Allocating tape drive /dev/rmt0...

/dev/rmt0 allocated.

VOL1ITDS01 CONTROLLER

4

Label Identifier: VOL1
Volume Identifier: ITDS01
Volume Accessibility:
Owner Identifier:
Label Standard Version: 4

HDR1D001 ITDS0100010001000100 93057 93057 000000 CONTROLLER

Label Identifier: HDR1
File Identifier: D001
File Set Identifier: ITDS01
File Section Number: 0001
File Sequence Number: 0001
Generation Number: 0001
Generation Version Number: 00
Creation Date: 93057
Expiration Date: 93057
File Accessibility:
Block Count: 000000
Implementation Identifier: CONTROLLER

HDR2D0204800260

00

Label Identifier: HDR2
Recording Format: D
Block Length: 02048
Record Length: 00260
Offset Length: 00

***** Tape Mark *****

Number of data blocks read = 1.

***** Tape Mark *****

EOF1D001 ITDS0100010001000100 93057 93057 000001 CONTROLLER

```
Label Identifier: EOF1
File Identifier: D001
File Set Identifier: ITDS01
File Section Number: 0001
File Sequence Number: 0001
Generation Number: 0001
Generation Version Number: 00
Creation Date: 93057
Expiration Date: 93057
File Accessibility:
Block Count: 000001
Implementation Identifier: CONTROLLER
```

EOF2D0204800260 00

```
Label Identifier: EOF2
Recording Format: D
Block Length: 02048
Record Length: 00260
Offset Length: 00
```

***** Tape Mark *****

HDR1D001T001 ITDS0100010002000100 93057 93057 000000 CONTROLLER

```
Label Identifier: HDR1
File Identifier: D001T001
File Set Identifier: ITDS01
File Section Number: 0001
File Sequence Number: 0002
Generation Number: 0001
Generation Version Number: 00
Creation Date: 93057
Expiration Date: 93057
File Accessibility:
Block Count: 000000
Implementation Identifier: CONTROLLER
```

HDR2D0204800260 00

```
Label Identifier: HDR1
File Identifier: D001R009
File Set Identifier: ITDS01
File Section Number: 0001
```

File Sequence Number: 0010
Generation Number: 0001
Generation Version Number: 00
Creation Date: 93057
Expiration Date: 93057
File Accessibility:
Block Count: 000000
Implementation Identifier: CONTROLLER

HDR2F0204800128

00

Label Identifier: HDR2
Recording Format: F
Block Length: 02048
Record Length: 00128
Offset Length: 00

***** Tape Mark *****

Actual Block Size Found = 2048 Bytes.

Number of data blocks read = 5.

***** Tape Mark *****

EOF1D001R009

ITDS0100010010000100 93057 93057 000005 CONTROLLER

Label Identifier: EOF1
File Identifier: D001R009
File Set Identifier: ITDS01
File Section Number: 0001
File Sequence Number: 0010
Generation Number: 0001
Generation Version Number: 00
Creation Date: 93057
Expiration Date: 93057
File Accessibility:
Block Count: 000005
Implementation Identifier: CONTROLLER

EOF2F0204800128

00

Label Identifier: EOF2
Recording Format: F
Block Length: 02048
Record Length: 00128
Offset Length: 00

***** Tape Mark *****

***** Tape Mark *****

End of Volume ITDS01

End Of Tape File Set

Deallocating /dev/rmt0...

Tape Import Process terminated with 0 error(s), 0 warning(s),
and 0 note(s).

9.3 Tape File Set Validation Log

Air Force CALS Test Network File Set Evaluation - Version 1.2; Release Number 8
Standards referenced:

MIL-STD-1840A (1987) - Automated Interchange of Technical Information

Tue Mar 16 11:28:45 1993

MIL-STD-1840A File Set Evaluation Log

File Set: Set073

Found file: D001

Extracting Document Declaration Header Records...

Evaluating Document Declaration Header Records...

srcsys: John P. Kent, ITDS Chief Engineer, Northrop Corporation, B-2 Division, L591/GK
E. Washington Blvd., Pico Rivera, CA 90660-3765 (310) 948-0624

srcdocid: 1B-2A-2-21JG-10-1

srcrelid: NONE

chglvl: ORIGINAL

dteisu: 19910301

dstsys: Jeff Fisher, Integration Manager, USAF CALS Test Bed, HQ AFMC (I)/ENCT,
TechneCenter, 4027 Col. Glenn Highway, Dayton, OH 45431-1601

dstdocid: 1B-2A-2-21JG-10-1

dstrelid: NONE

dtetrn: 19930226

dlvacc: NONE

filcnt: T1, H1, G1, C1, Q4, R1

ttlcls: UNCLASSIFIED

doccls: UNCLASSIFIED

doctyp: JOB GUIDE

docttl: ENVIRONMENTAL CONTROL - ECS CONTROL

Found file: D001T001

Extracting Text Header Records...

Evaluating Text Header Records...

srcdocid: 1B-2A-2-21JG-10-1

dstdocid: 1B-2A-2-21JG-10-1

txtfilid: W

doccls: UNCLASSIFIED

notes: NONE

Saving Text Header File: D001T001_HDR

Saving Text Data File: D001T001_TXT

Found file: D001G002

Extracting DTD Header Records...
Evaluating DTD Header Records...

srcdocid: 1B-2A-2-21JG-10-1
dstdocid: 1B-2A-2-21JG-10-1
notes: NONE

Saving DTD Header File: D001G002_HDR
Saving DTD Data File: D001G002_DTD

Found file: D001H003
Extracting Output Specification Header Records...
Evaluating Output Specification Header Records...

srcdocid: 1B-2A-2-21JG-10-1
dstdocid: 1B-2A-2-21JG-10-1
notes: NONE

Saving Output Specification Header File: D001H003_HDR
Saving Output Specification Data File: D001H003_OS

Found file: D001Q004
Extracting IGES Header Records...
Evaluating IGES Header Records...

srcdocid: 1B-2A-2-21JG-10-1
dstdocid: 1B-2A-2-21JG-10-1
txtfilid: W
figid: NONE
srcgph: B2AJG2111-0101A
doccls: UNCLASSIFIED
notes: NONE

Saving IGES Header File: D001Q004_HDR
Saving IGES Data File: D001Q004_IGS

Found file: D001Q005
Extracting IGES Header Records...
Evaluating IGES Header Records...

srcdocid: 1B-2A-2-21JG-10-1
dstdocid: 1B-2A-2-21JG-10-1
txtfilid: W
figid: NONE
srcgph: B2AJG2112-0101A
doccls: UNCLASSIFIED
notes: NONE

Saving IGES Header File: D001Q005_HDR

Saving IGES Data File: D001Q005_IGS

Found file: D001Q006
Extracting IGES Header Records...
Evaluating IGES Header Records...

srcdocid: 1B-2A-2-21JG-10-1
dstdocid: 1B-2A-2-21JG-10-1
txtfilid: W
figid: NONE
srcgph: B2AJG2112-0109C
doccls: UNCLASSIFIED
notes: NONE

Saving IGES Header File: D001Q006_HDR
Saving IGES Data File: D001Q006_IGS

Found file: D001Q007
Extracting IGES Header Records...
Evaluating IGES Header Records...

srcdocid: 1B-2A-2-21JG-10-1
dstdocid: 1B-2A-2-21JG-10-1
txtfilid: W
figid: NONE
srcgph: B2AJG2112-0110B
doccls: UNCLASSIFIED
notes: NONE

Saving IGES Header File: D001Q007_HDR
Saving IGES Data File: D001Q007_IGS

Found file: D001C008
Extracting CGM Header Records...
Evaluating CGM Header Records...

srcdocid: 1B-2A-2-21JG-10-1
dstdocid: 1B-2A-2-21JG-10-1
txtfilid: W
figid: NONE
srcgph: B2AJG2111-0103D
doccls: UNCLASSIFIED
notes: NONE

Saving CGM Header File: D001C008_HDR
Saving CGM Data File: D001C008_CGM

Found file: D001R009
Extracting Raster Header Records...

Evaluating Raster Header Records...

srcdocid: 1B-2A-2-21JG-10-1
dstdocid: 1B-2A-2-21JG-10-1
txtfilid: W
figid: NONE
srcgph: B2AJG2111-0104D
doccls: UNCLASSIFIED
rtype: 1
rorient: 000,270
rpelcnt: 000312,000500
rdensty: 0300
notes: NONE

Saving Raster Header File: D001R009_HDR
Saving Raster Data File: D001R009_GR4

Evaluating numbering scheme...
No errors were encountered during numbering scheme evaluation.
Numbering scheme evaluation complete.

Checking file count...
No errors were encountered during file count verification.
File Count verification complete.

No errors were encountered in Document D001.

No errors were encountered in this File Set.

MIL-STD-1840A File Set Evaluation Complete.

10. Appendix B - Detailed IGES Analysis

10.1 File D001Q004

10.1.1 Parser/Verifier Log

```
*** IGES DATA FILE ANALYSIS ***
***      MARCH 1992      ***
***  IGES Data Analysis  ***
***    (708) 449-3430    ***
```

Input file is /novell/9323/D001Q004_IGS

Checking conformance to CALS Class I (MIL-D-28000A 2/10/92)

Today is March 16, 1993 4:59 PM

*** File and Product Name Information ***

```
File name from sender      = '0101A.gef.igs'
File creation Date.Time    = '930218.130008'
Model change Date.Time     = ''
Author                     = 'NORTHROP B2 ITDS CTB'
Department                 = ''
Product name from sender   = '0101A.gef.igs'
Destination product name   = '0101A.gef.igs'
```

*** Parameter Delimiters ***

```
Delimiter = ','
Terminator = ';'

```

*** Originating System Data ***

```
System ID          = 'ITDS CONVERTER: GEF_IGES'
Preprocessor version = '1.0'
Specification version = 6 (IGES 4.0)
```

*** Precision levels ***

```
Integer bits = 32
Floating point - Exponent = 38  Mantissa = 6
Double precision - Exponent = 308  Mantissa = 15
```

*** Global Model Data ***

```
Model scale          = 1.0000E+00
```

Unit flag = 1
 Units = 'IN'
 Line weights = 1
 Maximum line thickness = 6.300000E-03
 Minimum line thickness = 6.300000E-03
 CAUTION 2317: Maximum line thickness equal to minimum thickness.
 Granularity = 1.000000E-03
 Maximum coordinate = 7.243750E+00

Drafting standard applicable to original data is not specified.

*** Status Flag Summary ***

Blank status:	Visible	1850
	Blanked	0
Independence:	Independent	1838
	Physically Subordinate	8
	Logically Subordinate	4
	Totally Subordinate	0
Entity use:	Geometry	1831
	Annotation	19
	Definition	0
	Other	0
	Logical/Positional	0
	2D parametric	0
	Not Specified	0
Hierarchy:	Structure DE applies	0
	Subordinate DE applies	1850
	Hierarchy property applies	0
	Not Specified	0

*** Entity Occurrence Counts ***

Entity	Form	Level	Count	Type
-----	----	-----	-----	----
104	1	0	659	Conic arc - ellipse
106	63	0	8	Simple closed planar curve
110	0	0	497	Line
112	0	0	5	Parametric spline curve
124	0	0	659	Transformation matrix
212	0	0	9	General note
230	0	0	8	Sectioned area (Standard Crosshatching)
404	0	0	1	Drawing
406	16	0	1	Property - Drawing size
406	18	0	2	Property - Intercharacter spacing

410 0 0 1 View - Orthographic parallel

*** Entity Count by Level ***

Level	Count
0	1850

*** Labeling Information ***

0% of the entities are labeled.

Unlabeled 1850

*** Line Fonts Used in Data ***

100	102	104	106	108	110	112	114	
-	-	-	-	-	-	-	-	Undefined
-	-	166	8	-	42	4	-	Solid
-	-	-	-	-	-	-	-	Dashed
-	-	493	-	-	455	1	-	Phantom
-	-	-	-	-	-	-	-	Center-line
-	-	-	-	-	-	-	-	Dotted
-	-	-	-	-	-	-	-	User defined
116	118	120	122	124	125	126	128	
-	-	-	-	659	-	-	-	Undefined
-	-	-	-	-	-	-	-	Solid
-	-	-	-	-	-	-	-	Dashed
-	-	-	-	-	-	-	-	Phantom
-	-	-	-	-	-	-	-	Center-line
-	-	-	-	-	-	-	-	Dotted
-	-	-	-	-	-	-	-	User defined
130	132	134	136	138	140	142	144	
-	-	-	-	-	-	-	-	Undefined
-	-	-	-	-	-	-	-	Solid
-	-	-	-	-	-	-	-	Dashed
-	-	-	-	-	-	-	-	Phantom
-	-	-	-	-	-	-	-	Center-line
-	-	-	-	-	-	-	-	Dotted
-	-	-	-	-	-	-	-	User defined

*** Line Widths Used in Data ***

Weight	Count	Width
--------	-------	-------

Defaulted 1850 (0.0063)

*** Colors Used in Data ***

Defaulted 1784
Black 57
White 9

***** ENTITY ANALYSIS *****

*** Entity type: 104

WARNING 2265: Start point off conic by 1.190300E-03 at D 539.
WARNING 2265: Start point off conic by 1.234213E-03 at D 595.
WARNING 2265: Start point off conic by 1.388423E-03 at D 743.
WARNING 2039: End point off conic by 1.388423E-03 at D 743.
WARNING 2265: Messages regarding invalid start point suppressed.
WARNING 2039: Messages regarding conic end points suppressed.

*** Entity type: 106

*** Entity type: 110

-- 497 lines averaging 2.015512E-01 units --

*** Entity type: 112

*** Entity type: 124

659 transformation matrices, 659 non-zero translations.
NOTE 2341: 659 matrices contain translation information.

*** Entity type: 212

9 text strings in data file.
Average text aspect ratio in file is 0.9883842.
Minimum text aspect ratio in file is 0.9821430.
Maximum text aspect ratio in file is 0.9910715.

FONTS USED IN FILE

FONT	COUNT	NAME
1	9	Default ASCII Style

*** Entity type: 230

*** Entity type: 404

Drawing at D 5 contains 1 views.
Drawing at D 5 contains 0 annotation entities.

*** Entity type: 406

*** Entity type: 410

Scale of view at D 1 is 1.000000E+00.
Orthographic View entity at D 1 has 0 clipping planes specified.
XMIN = Not Set XMAX = Not Set
YMIN = Not Set YMAX = Not Set
ZMIN = Not Set ZMAX = Not Set

*** Message Summary ***

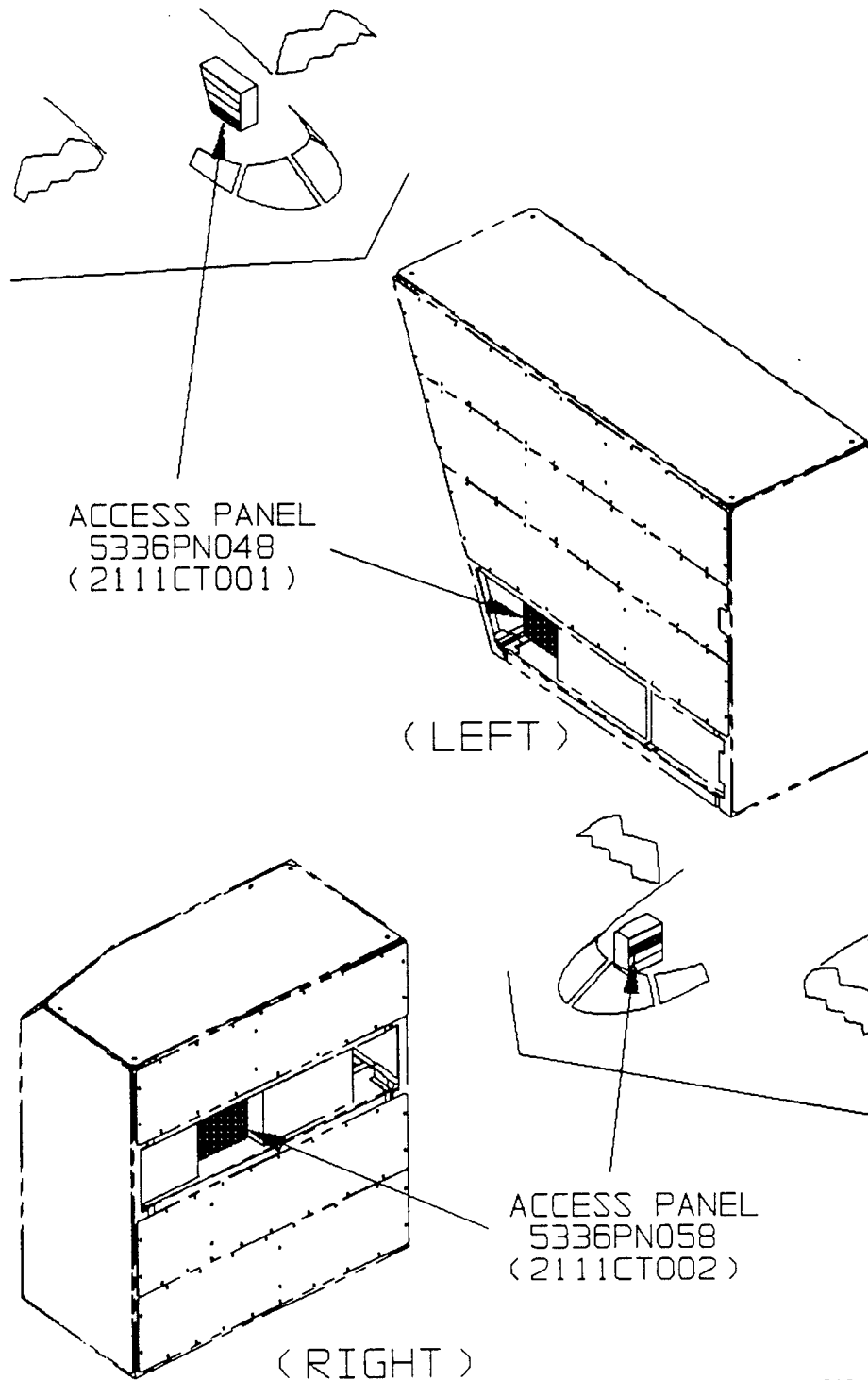
2015: 98 Mathematically incorrect definitions.
2018: 1 Problems with line weight/width display information.

*** Error Summary ***

0 fatal errors
0 severe errors
0 errors
98 warnings
1 cautions
0 nitpicks
1 notes

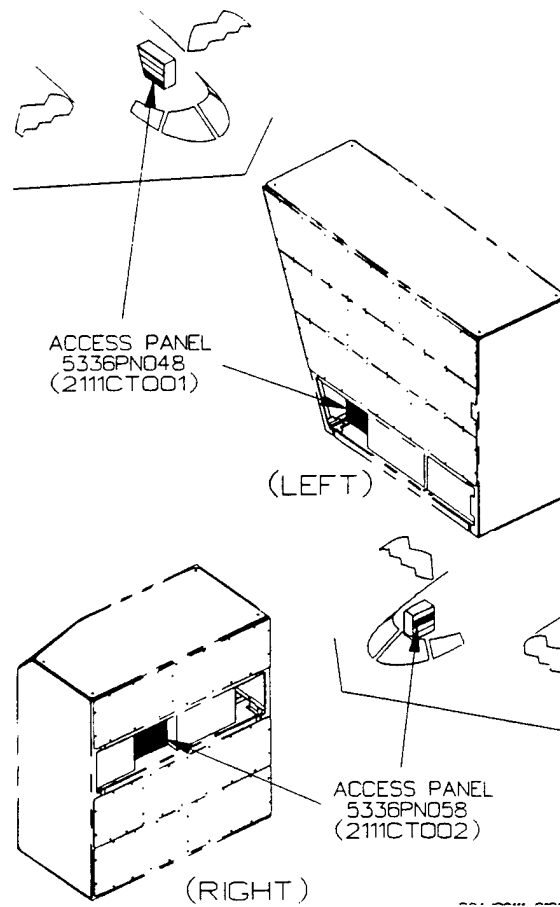
*** End of Analysis of /novell/9323/D001Q004_IGS ***

10.1.2 Output Cadkey v5.02

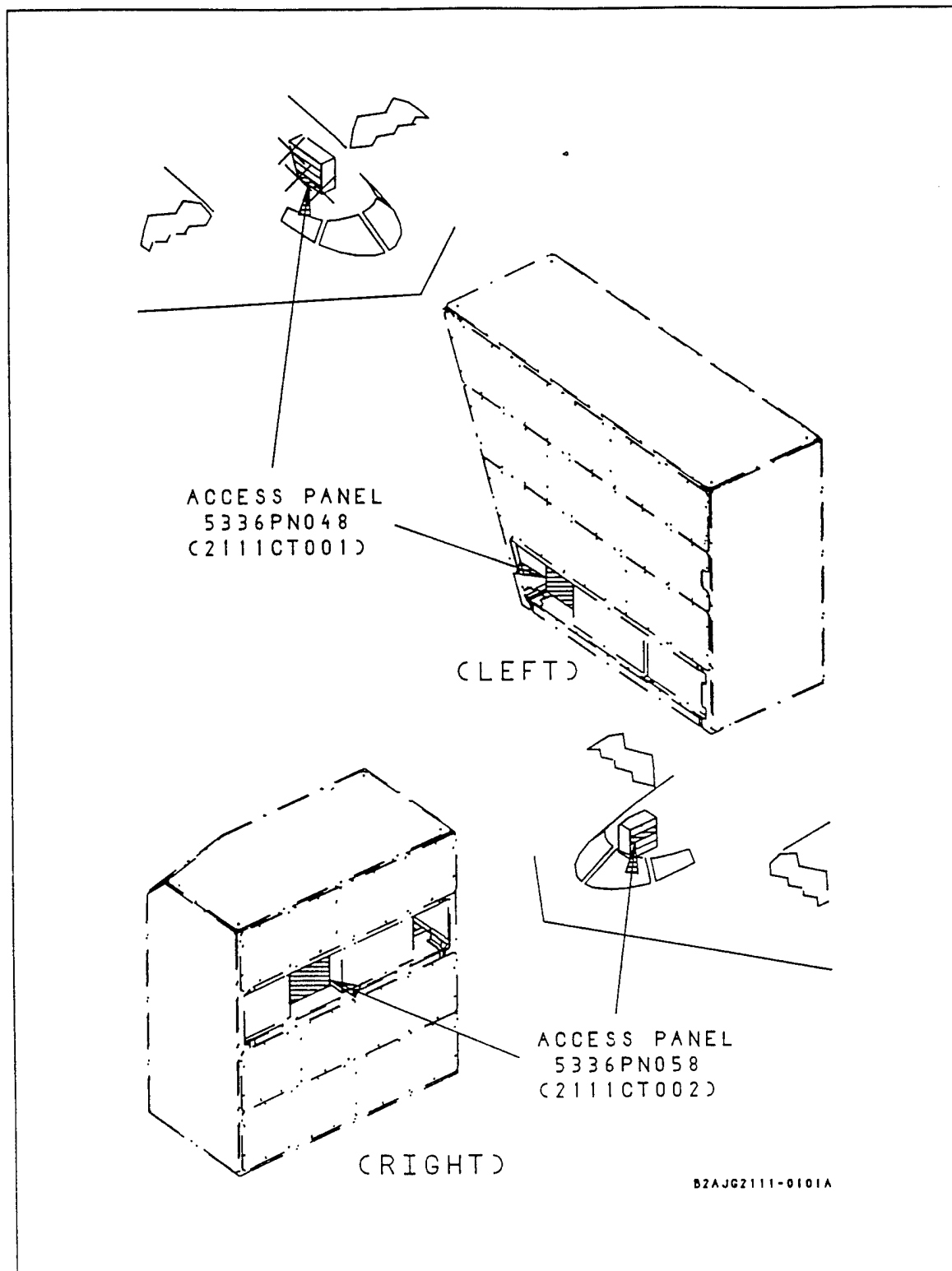


B2AJG2111-0101A

10.1.3 Output IGESView



10.1.4 Output IGESWorks



10.2 File D001Q005

10.2.1 Parser/Verifier Log

```
*** IGES DATA FILE ANALYSIS ***
***      MARCH 1992      ***
***   IGES Data Analysis   ***
***   (708) 449-3430      ***
```

Input file is /novell/9323/D001Q005_IGS

Checking conformance to CALS Class I (MIL-D-28000A 2/10/92)

Today is March 16, 1993 4:59 PM

*** File and Product Name Information ***

```
File name from sender      = '0101A.gef.igs'
File creation Date.Time    = '930218.130511'
Model change Date.Time     = ''
Author                     = 'NORTHROP B2 ITDS CTB'
Department                 = ''
Product name from sender   = '0101A.gef.igs'
Destination product name   = '0101A.gef.igs'
```

*** Parameter Delimiters ***

```
Delimiter = ','
Terminator = ';'

```

*** Originating System Data ***

```
System ID          = 'ITDS CONVERTER: GEF_IGES'
Preprocessor version = '1.0'
Specification version = 6 (IGES 4.0)
```

*** Precision levels ***

```
Integer bits = 32
Floating point - Exponent = 38  Mantissa = 6
Double precision - Exponent = 308  Mantissa = 15
```

*** Global Model Data ***

```
Model scale          = 1.0000E+00
Unit flag            = 1
Units                = 'IN'
Line weights         = 1
```

Maximum line thickness = 3.937490E-03
 Minimum line thickness = 3.937490E-03
 CAUTION 2317: Maximum line thickness equal to minimum thickness.
 Granularity = 1.000000E-03
 Maximum coordinate = 4.168750E+00

Drafting standard applicable to original data is not specified.

*** Status Flag Summary ***

Blank status:	Visible	834
	Blanked	0
Independence:	Independent	830
	Physically Subordinate	1
	Logically Subordinate	3
	Totally Subordinate	0
Entity use:	Geometry	830
	Annotation	4
	Definition	0
	Other	0
	Logical/Positional	0
	2D parametric	0
	Not Specified	0
Hierarchy:	Structure DE applies	0
	Subordinate DE applies	834
	Hierarchy property applies	0
	Not Specified	0

*** Entity Occurrence Counts ***

Entity	Form	Level	Count	Type
-----	----	-----	-----	-----
100	0	0	1	Circular arc
104	1	0	108	Conic arc - ellipse
106	63	0	1	Simple closed planar curve
110	0	0	421	Line
112	0	0	189	Parametric spline curve
124	0	0	108	Transformation matrix
212	0	0	1	General note
230	0	0	1	Sectioned area (Standard Crosshatching)
404	0	0	1	Drawing
406	16	0	1	Property - Drawing size
406	18	0	1	Property - Intercharacter spacing
410	0	0	1	View - Orthographic parallel

*** Entity Count by Level ***

Level	Count
0	834

*** Labeling Information ***

0% of the entities are labeled.

Unlabeled 834

*** Line Fonts Used in Data ***

100	102	104	106	108	110	112	114	
-	-	-	-	-	-	-	-	Undefined
1	-	108	1	-	415	189	-	Solid
-	-	-	-	-	-	-	-	Dashed
-	-	-	-	-	1	-	-	Phantom
-	-	-	-	-	5	-	-	Center-line
-	-	-	-	-	-	-	-	Dotted
-	-	-	-	-	-	-	-	User defined
116	118	120	122	124	125	126	128	
-	-	-	-	108	-	-	-	Undefined
-	-	-	-	-	-	-	-	Solid
-	-	-	-	-	-	-	-	Dashed
-	-	-	-	-	-	-	-	Phantom
-	-	-	-	-	-	-	-	Center-line
-	-	-	-	-	-	-	-	Dotted
-	-	-	-	-	-	-	-	User defined
130	132	134	136	138	140	142	144	
-	-	-	-	-	-	-	-	Undefined
-	-	-	-	-	-	-	-	Solid
-	-	-	-	-	-	-	-	Dashed
-	-	-	-	-	-	-	-	Phantom
-	-	-	-	-	-	-	-	Center-line
-	-	-	-	-	-	-	-	Dotted
-	-	-	-	-	-	-	-	User defined

*** Line Widths Used in Data ***

Weight	Count	Width
Defaulted	834	(0.0039)

*** Colors Used in Data ***

Defaulted	118
Black	715
White	1

***** ENTITY ANALYSIS *****

*** Entity type: 100

*** Entity type: 104

WARNING 2265: Start point off conic by 1.336260E-03 at D 969.
WARNING 2039: End point off conic by 1.336260E-03 at D 969.
WARNING 2265: Start point off conic by 1.804375E-03 at D 973.
WARNING 2039: End point off conic by 1.804375E-03 at D 973.
WARNING 2265: Start point off conic by 1.328401E-03 at D 1173.
WARNING 2265: Start point off conic by 4.571146E-03 at D 1285.
WARNING 2039: End point off conic by 4.571146E-03 at D 1285.

*** Entity type: 106

*** Entity type: 110

-- 421 lines averaging 1.199761E-01 units --

*** Entity type: 112

WARNING 2238: Polynomial segment (4) at D 1343 is degenerate.
WARNING 2238: Polynomial segment (1) at D 1487 is degenerate.
WARNING 2238: Polynomial segment (1) at D 1513 is degenerate.
WARNING 2238: Polynomial segment (0) at D 1537 is degenerate.
WARNING 2238: Polynomial segment (1) at D 1541 is degenerate.
WARNING 2238: Polynomial segment (0) at D 1645 is degenerate.
WARNING 2238: Polynomial segment (1) at D 1647 is degenerate.

*** Entity type: 124

108 transformation matrices, 108 non-zero translations.

NOTE 2341: 108 matrices contain translation information.

*** Entity type: 212

1 text strings in data file.
Average text aspect ratio in file is 0.9873866.
Minimum text aspect ratio in file is 0.9873866.
Maximum text aspect ratio in file is 0.9873866.

FONTS USED IN FILE

FONT	COUNT	NAME
------	-------	------

1	1	Default ASCII Style
---	---	---------------------

*** Entity type: 230

*** Entity type: 404

Drawing at D 5 contains 1 views.

Drawing at D 5 contains 0 annotation entities.

*** Entity type: 406

*** Entity type: 410

Scale of view at D 1 is 1.000000E+00.

Orthographic View entity at D 1 has 0 clipping planes specified.

XMIN = Not Set XMAX = Not Set

YMIN = Not Set YMAX = Not Set

ZMIN = Not Set ZMAX = Not Set

*** Message Summary ***

2015: 14 Mathematically incorrect definitions.

2018: 1 Problems with line weight/width display information.

*** Error Summary ***

0 fatal errors

0 severe errors

0 errors

14 warnings

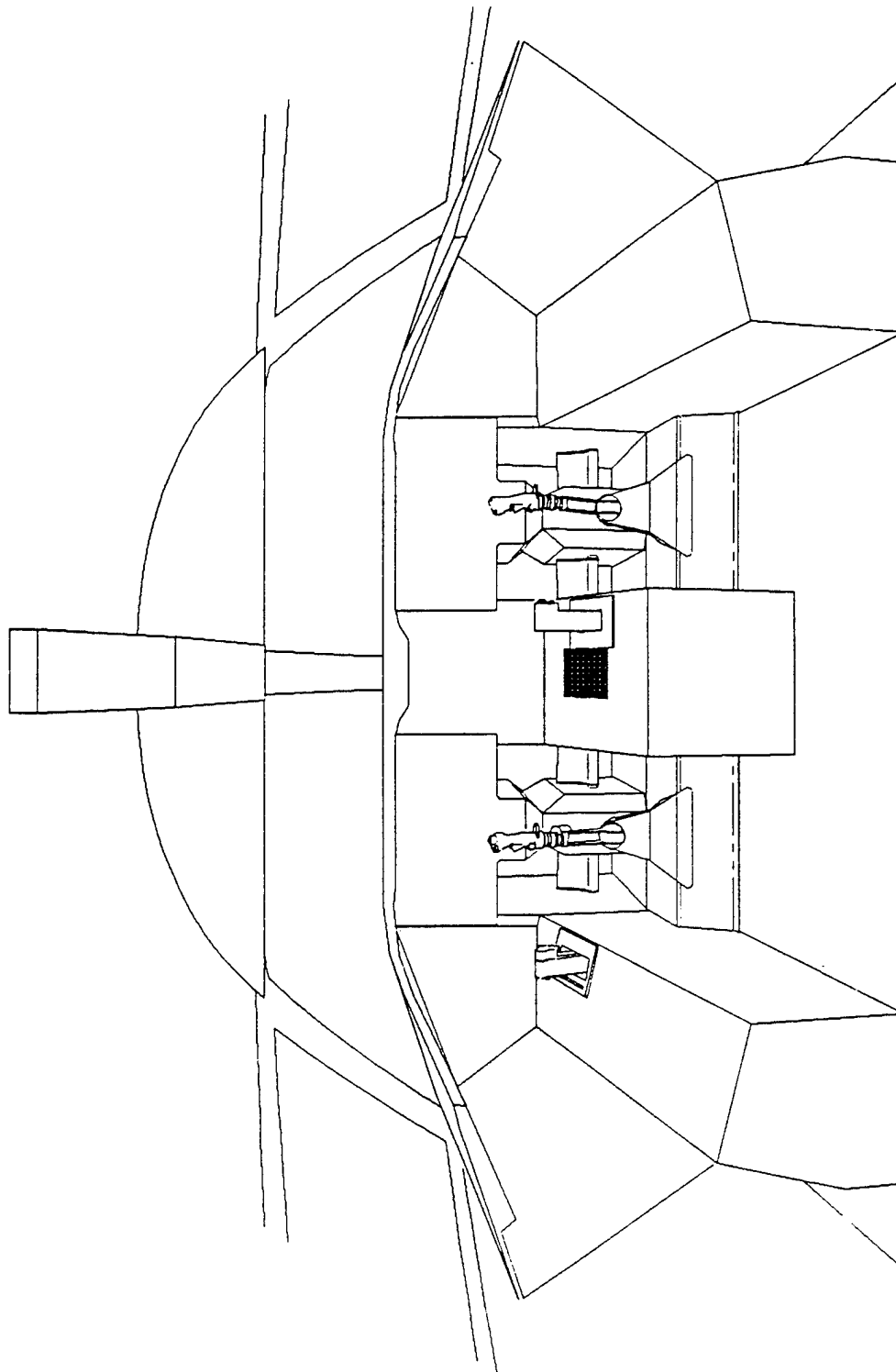
1 cautions

0 nitpicks

1 notes

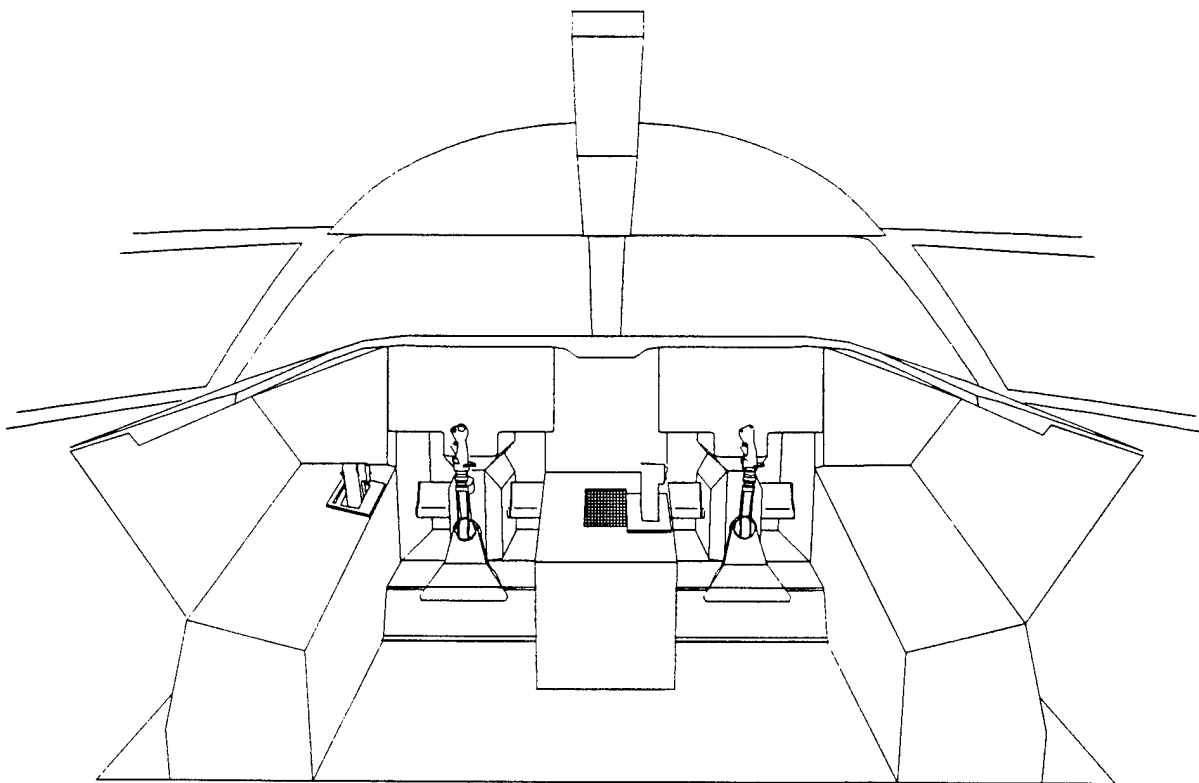
*** End of Analysis of /novell/9323/D001Q005_IGS ***

10.2.2 Output Cadkey v5.02



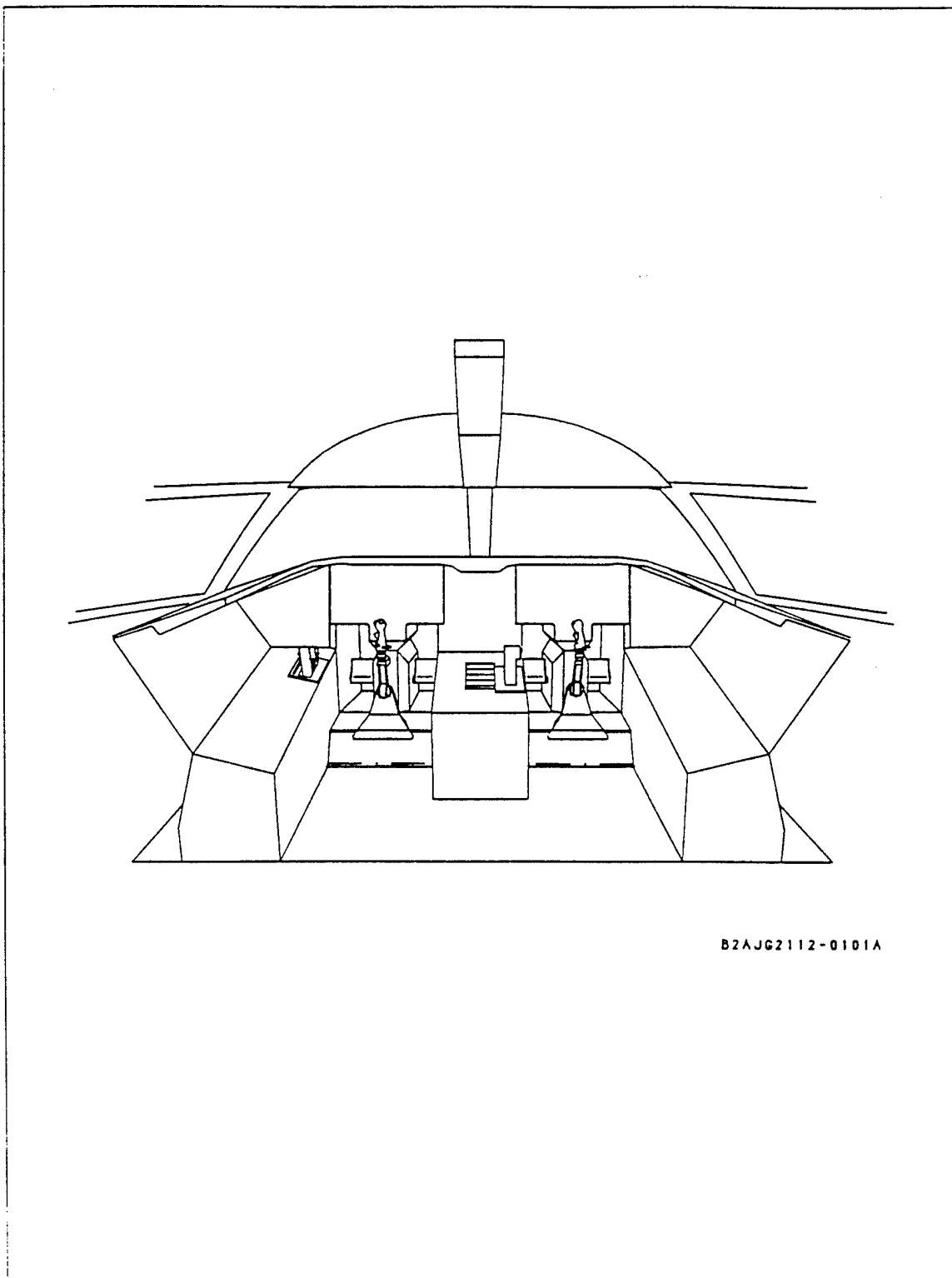
B2AJG2112-0101

10.2.3 Output IGESView



R2A IG2112-0101A

10.2.4 Output IGESWorks



10.3 File D001Q006

10.3.1 Parser/Verifier Log

```
*** IGES DATA FILE ANALYSIS ***
***      MARCH 1992      ***
***  IGES Data Analysis  ***
***      (708) 449-3430   ***
```

Input file is /novell/9323/D001Q006_IGS

Checking conformance to CALS Class I (MIL-D-28000A 2/10/92)

Today is March 16, 1993 5:00 PM

*** File and Product Name Information ***

```
File name from sender      = '0109C.gef.igs'
File creation Date.Time    = '930218.130525'
Model change Date.Time     = ''
Author                     = 'NORTHROP B2 ITDS CTB'
Department                 = ''
Product name from sender   = '0109C.gef.igs'
Destination product name   = '0109C.gef.igs'
```

*** Parameter Delimiters ***

```
Delimiter  = ','
Terminator = ';' 
```

*** Originating System Data ***

```
System ID           = 'ITDS CONVERTER: GEF_IGES'
Preprocessor version = '1.0'
Specification version = 6 (IGES 4.0)
```

*** Precision levels ***

```
Integer bits =      32
Floating point - Exponent =      38  Mantissa =      6
Double precision - Exponent =     308  Mantissa =     15
```

*** Global Model Data ***

```
Model scale          = 1.0000E+00
Unit flag            = 1
Units                = 'IN'
Line weights         = 1
```

Maximum line thickness = 6.300000E-03
 Minimum line thickness = 6.300000E-03
 CAUTION 2317: Maximum line thickness equal to minimum thickness.
 Granularity = 1.000000E-03
 Maximum coordinate = 7.243750E+00

Drafting standard applicable to original data is not specified.

*** Status Flag Summary ***

Blank status:	Visible	1432
	Blanked	0
Independence:	Independent	1422
	Physically Subordinate	6
	Logically Subordinate	4
	Totally Subordinate	0
Entity use:	Geometry	1417
	Annotation	15
	Definition	0
	Other	0
	Logical/Positional	0
	2D parametric	0
	Not Specified	0
Hierarchy:	Structure DE applies	0
	Subordinate DE applies	1432
	Hierarchy property applies	0
	Not Specified	0

*** Entity Occurrence Counts ***

Entity	Form	Level	Count	Type
-----	----	-----	-----	-----
100	0	0	11	Circular arc
104	1	0	266	Conic arc - ellipse
106	63	0	6	Simple closed planar curve
110	0	0	676	Line
112	0	0	189	Parametric spline curve
124	0	0	266	Transformation matrix
212	0	0	7	General note
230	0	0	6	Sectioned area (Standard Crosshatching)
404	0	0	1	Drawing
406	16	0	1	Property - Drawing size
406	18	0	2	Property - Intercharacter spacing
410	0	0	1	View - Orthographic parallel

*** Entity Count by Level ***

Level	Count
0	1432

*** Labeling Information ***

0% of the entities are labeled.

Unlabeled	1432
-----------	------

*** Line Fonts Used in Data ***

100	102	104	106	108	110	112	114	
-	-	-	-	-	-	-	-	Undefined
11	-	252	6	-	600	189	-	Solid
-	-	1	-	-	19	-	-	Dashed
-	-	13	-	-	50	-	-	Phantom
-	-	-	-	-	7	-	-	Center-line
-	-	-	-	-	-	-	-	Dotted
-	-	-	-	-	-	-	-	User defined

116	118	120	122	124	125	126	128	
-	-	-	-	266	-	-	-	Undefined
-	-	-	-	-	-	-	-	Solid
-	-	-	-	-	-	-	-	Dashed
-	-	-	-	-	-	-	-	Phantom
-	-	-	-	-	-	-	-	Center-line
-	-	-	-	-	-	-	-	Dotted
-	-	-	-	-	-	-	-	User defined

130	132	134	136	138	140	142	144	
-	-	-	-	-	-	-	-	Undefined
-	-	-	-	-	-	-	-	Solid
-	-	-	-	-	-	-	-	Dashed
-	-	-	-	-	-	-	-	Phantom
-	-	-	-	-	-	-	-	Center-line
-	-	-	-	-	-	-	-	Dotted
-	-	-	-	-	-	-	-	User defined

*** Line Widths Used in Data ***

Weight	Count	Width
Defaulted	1432	(0.0063)

*** Colors Used in Data ***

Defaulted	647
Black	778
White	7

***** ENTITY ANALYSIS *****

*** Entity type: 100

*** Entity type: 104

WARNING 2265: Start point off conic by 4.023317E-03 at D 953.
WARNING 2039: End point off conic by 4.023317E-03 at D 953.
WARNING 2265: Messages regarding invalid start point suppressed.
WARNING 2039: Messages regarding conic end points suppressed.

*** Entity type: 106

*** Entity type: 110

-- 676 lines averaging 1.383460E-01 units --

*** Entity type: 112

WARNING 2238: Polynomial segment (0) at D 1345 is degenerate.
WARNING 2238: Polynomial segment (1) at D 1423 is degenerate.
WARNING 2238: Polynomial segment (1) at D 1561 is degenerate.
WARNING 2238: Polynomial segment (0) at D 1563 is degenerate.
WARNING 2238: Polynomial segment (0) at D 1645 is degenerate.

*** Entity type: 124

266 transformation matrices, 266 non-zero translations.
NOTE 2341: 266 matrices contain translation information.

*** Entity type: 212

7 text strings in data file.
Average text aspect ratio in file is 0.9608803.
Minimum text aspect ratio in file is 0.8928572.
Maximum text aspect ratio in file is 0.9923470.

FONTS USED IN FILE

FONT	COUNT	NAME
------	-------	------

1 7 Default ASCII Style

*** Entity type: 230

*** Entity type: 404

Drawing at D 5 contains 1 views.

Drawing at D 5 contains 0 annotation entities.

*** Entity type: 406

*** Entity type: 410

Scale of view at D 1 is 1.000000E+00.

Orthographic View entity at D 1 has 0 clipping planes specified.

XMIN = Not Set XMAX = Not Set

YMIN = Not Set YMAX = Not Set

ZMIN = Not Set ZMAX = Not Set

*** Message Summary ***

2015: 39 Mathematically incorrect definitions.

2018: 1 Problems with line weight/width display information.

*** Error Summary ***

0 fatal errors

0 severe errors

0 errors

39 warnings

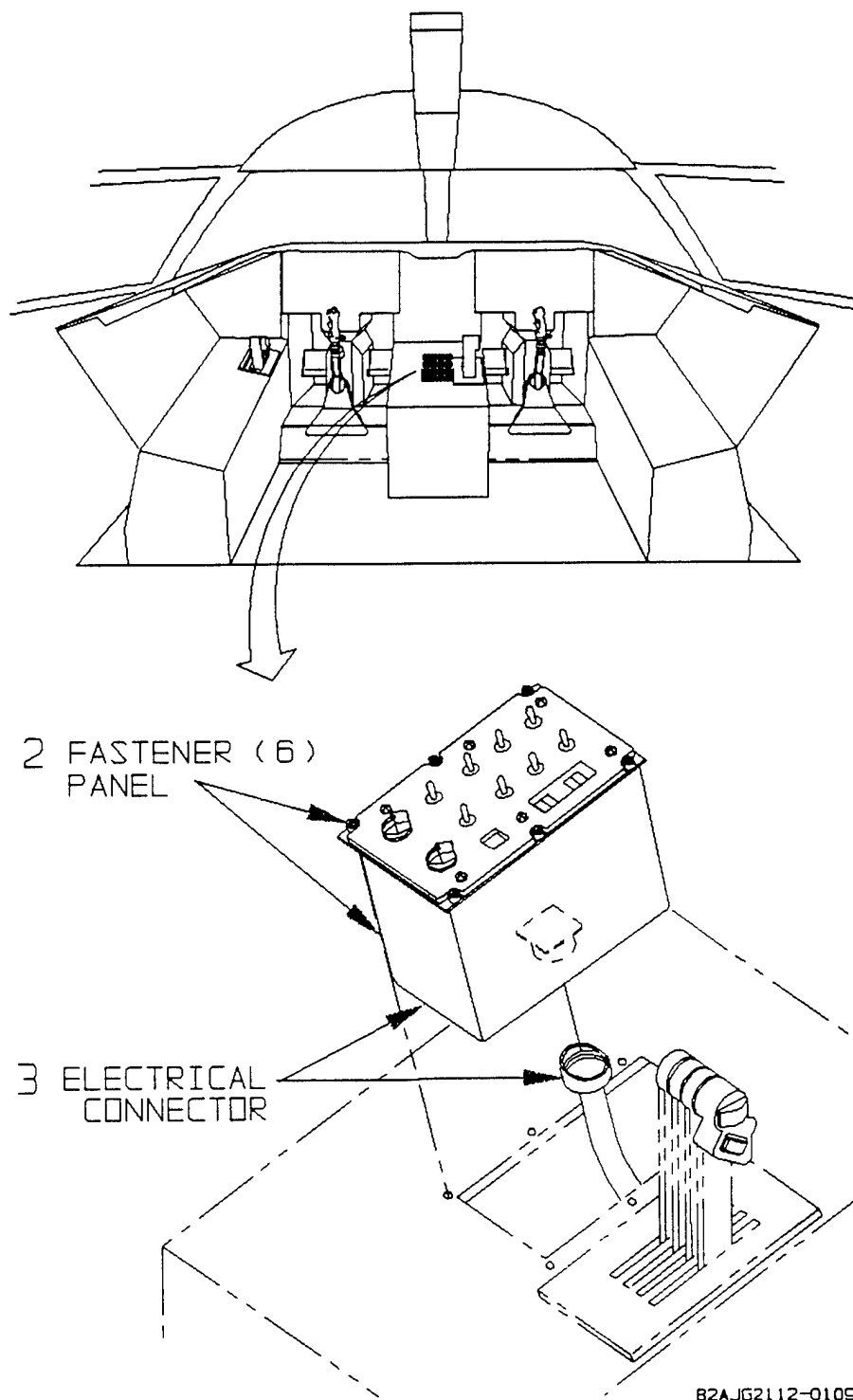
1 cautions

0 nitpicks

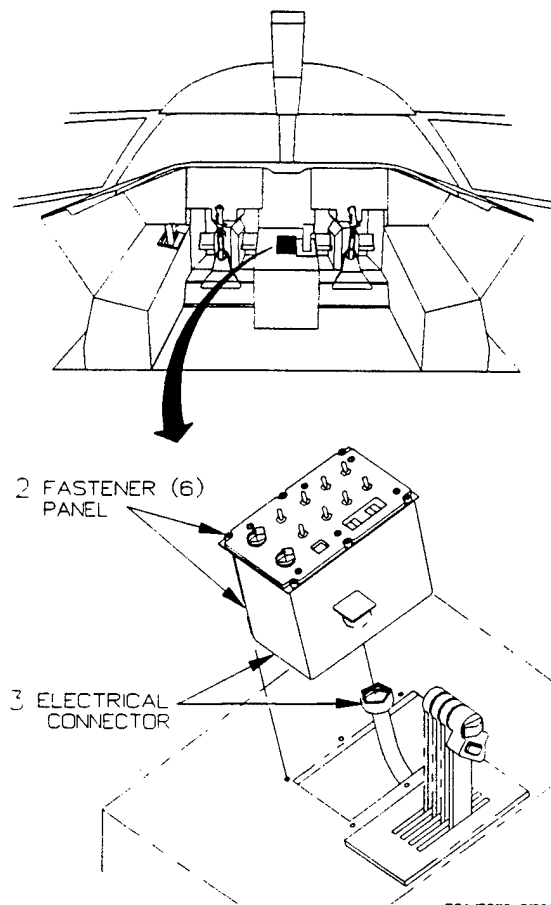
1 notes

*** End of Analysis of /novell/9323/D001Q006_IGS ***

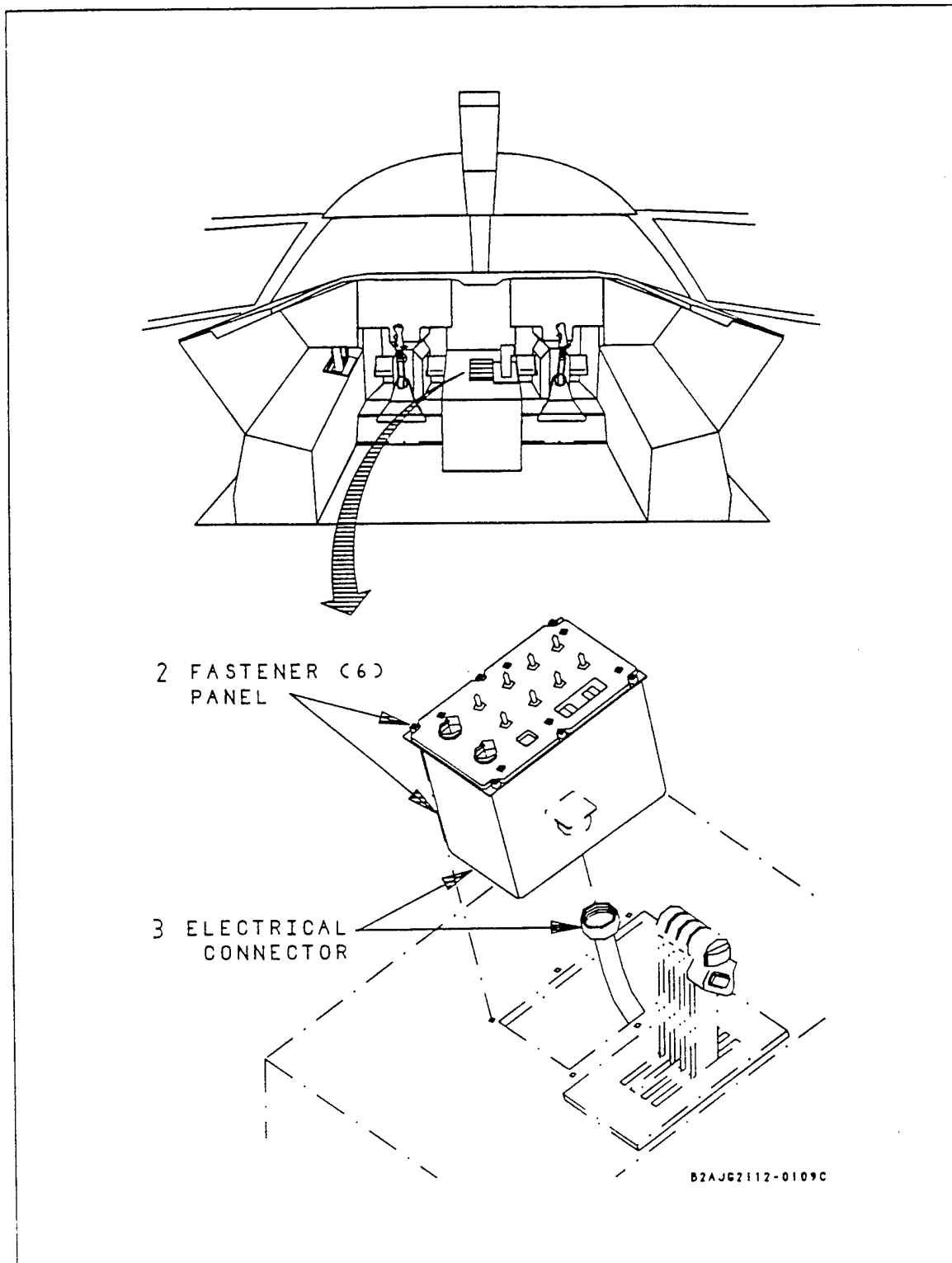
10.3.2 Output Cadkey v5.02



10.3.3 Output IGESView



10.3.4 Output IGESWorks



10.4 File D001Q007

10.4.1 Parser/Verifier Log

```
*** IGES DATA FILE ANALYSIS ***
***      MARCH 1992      ***
***   IGES Data Analysis   ***
***   (708) 449-3430      ***
```

Input file is /novell/9323/D001Q007_IGS

Checking conformance to CALS Class I (MIL-D-28000A 2/10/92)

Today is March 16, 1993 5:01 PM

*** File and Product Name Information ***

```
File name from sender      = '0110B.gef.igs'
File creation Date.Time    = '930218.130543'
Model change Date.Time     = ''
Author                     = 'NORTHROP B2 ITDS CTB'
Department                  = ''
Product name from sender   = '0110B.gef.igs'
Destination product name   = '0110B.gef.igs'
```

*** Parameter Delimiters ***

```
Delimiter  = ','
Terminator = ';'

```

*** Originating System Data ***

```
System ID           = 'ITDS CONVERTER: GEF_IGES'
Preprocessor version = '1.0'
Specification version = 6 (IGES 4.0)
```

*** Precision levels ***

```
Integer bits = 32
Floating point - Exponent = 38 Mantissa = 6
Double precision - Exponent = 308 Mantissa = 15
```

*** Global Model Data ***

```
Model scale      = 1.0000E+00
Unit flag        = 1
Units             = 'IN'
Line weights     = 1
```

Maximum line thickness = 6.300000E-03
 Minimum line thickness = 6.300000E-03
 CAUTION 2317: Maximum line thickness equal to minimum thickness.
 Granularity = 1.000000E-03
 Maximum coordinate = 7.243750E+00

Drafting standard applicable to original data is not specified.

*** Status Flag Summary ***

Blank status:	Visible	1433
	Blanked	0
Independence:	Independent	1423
	Physically Subordinate	6
	Logically Subordinate	4
	Totally Subordinate	0
Entity use:	Geometry	1417
	Annotation	16
	Definition	0
	Other	0
	Logical/Positional	0
	2D parametric	0
	Not Specified	0
Hierarchy:	Structure DE applies	0
	Subordinate DE applies	1433
	Hierarchy property applies	0
	Not Specified	0

*** Entity Occurrence Counts ***

Entity	Form	Level	Count	Type
-----	----	-----	-----	-----
100	0	0	11	Circular arc
104	1	0	266	Conic arc - ellipse
106	63	0	6	Simple closed planar curve
110	0	0	676	Line
112	0	0	189	Parametric spline curve
124	0	0	266	Transformation matrix
212	0	0	8	General note
230	0	0	6	Sectioned area (Standard Crosshatching)
404	0	0	1	Drawing
406	16	0	1	Property - Drawing size
406	18	0	2	Property - Intercharacter spacing
410	0	0	1	View - Orthographic parallel

*** Entity Count by Level ***

Level	Count
0	1433

*** Labeling Information ***

0% of the entities are labeled.

Unlabeled 1433

*** Line Fonts Used in Data ***

100	102	104	106	108	110	112	114	
-	-	-	-	-	-	-	-	Undefined
11	-	252	6	-	600	189	-	Solid
-	-	1	-	-	19	-	-	Dashed
-	-	13	-	-	50	-	-	Phantom
-	-	-	-	-	7	-	-	Center-line
-	-	-	-	-	-	-	-	Dotted
-	-	-	-	-	-	-	-	User defined
116	118	120	122	124	125	126	128	
-	-	-	-	266	-	-	-	Undefined
-	-	-	-	-	-	-	-	Solid
-	-	-	-	-	-	-	-	Dashed
-	-	-	-	-	-	-	-	Phantom
-	-	-	-	-	-	-	-	Center-line
-	-	-	-	-	-	-	-	Dotted
-	-	-	-	-	-	-	-	User defined
130	132	134	136	138	140	142	144	
-	-	-	-	-	-	-	-	Undefined
-	-	-	-	-	-	-	-	Solid
-	-	-	-	-	-	-	-	Dashed
-	-	-	-	-	-	-	-	Phantom
-	-	-	-	-	-	-	-	Center-line
-	-	-	-	-	-	-	-	Dotted
-	-	-	-	-	-	-	-	User defined

*** Line Widths Used in Data ***

Weight	Count	Width
Defaulted	1433	(0.0063)

*** Colors Used in Data ***

Defaulted	647
Black	778
White	8

***** ENTITY ANALYSIS *****

*** Entity type: 100

*** Entity type: 104

WARNING 2265: Start point off conic by 4.023317E-03 at D 955.
WARNING 2039: End point off conic by 4.023317E-03 at D 955.
WARNING 2265: Messages regarding invalid start point suppressed.
WARNING 2039: Messages regarding conic end points suppressed.

*** Entity type: 106

*** Entity type: 110

-- 676 lines averaging 1.380248E-01 units --

*** Entity type: 112

WARNING 2238: Polynomial segment (0) at D 1351 is degenerate.
WARNING 2238: Polynomial segment (1) at D 1421 is degenerate.
WARNING 2238: Polynomial segment (0) at D 1467 is degenerate.
WARNING 2238: Polynomial segment (1) at D 1567 is degenerate.
WARNING 2238: Polynomial segment (0) at D 1627 is degenerate.

*** Entity type: 124

266 transformation matrices, 266 non-zero translations.
NOTE 2341: 266 matrices contain translation information.

*** Entity type: 212

8 text strings in data file.
Average text aspect ratio in file is 0.9635382.
Minimum text aspect ratio in file is 0.8928572.
Maximum text aspect ratio in file is 0.9923470.

FONTS USED IN FILE

FONT	COUNT	NAME
------	-------	------

1 8 Default ASCII Style

*** Entity type: 230

*** Entity type: 404

Drawing at D 5 contains 1 views.

Drawing at D 5 contains 0 annotation entities.

*** Entity type: 406

*** Entity type: 410

Scale of view at D 1 is 1.000000E+00.

Orthographic View entity at D 1 has 0 clipping planes specified.

XMIN = Not Set XMAX = Not Set

YMIN = Not Set YMAX = Not Set

ZMIN = Not Set ZMAX = Not Set

*** Message Summary ***

2015: 39 Mathematically incorrect definitions.

2018: 1 Problems with line weight/width display information.

*** Error Summary ***

0 fatal errors

0 severe errors

0 errors

39 warnings

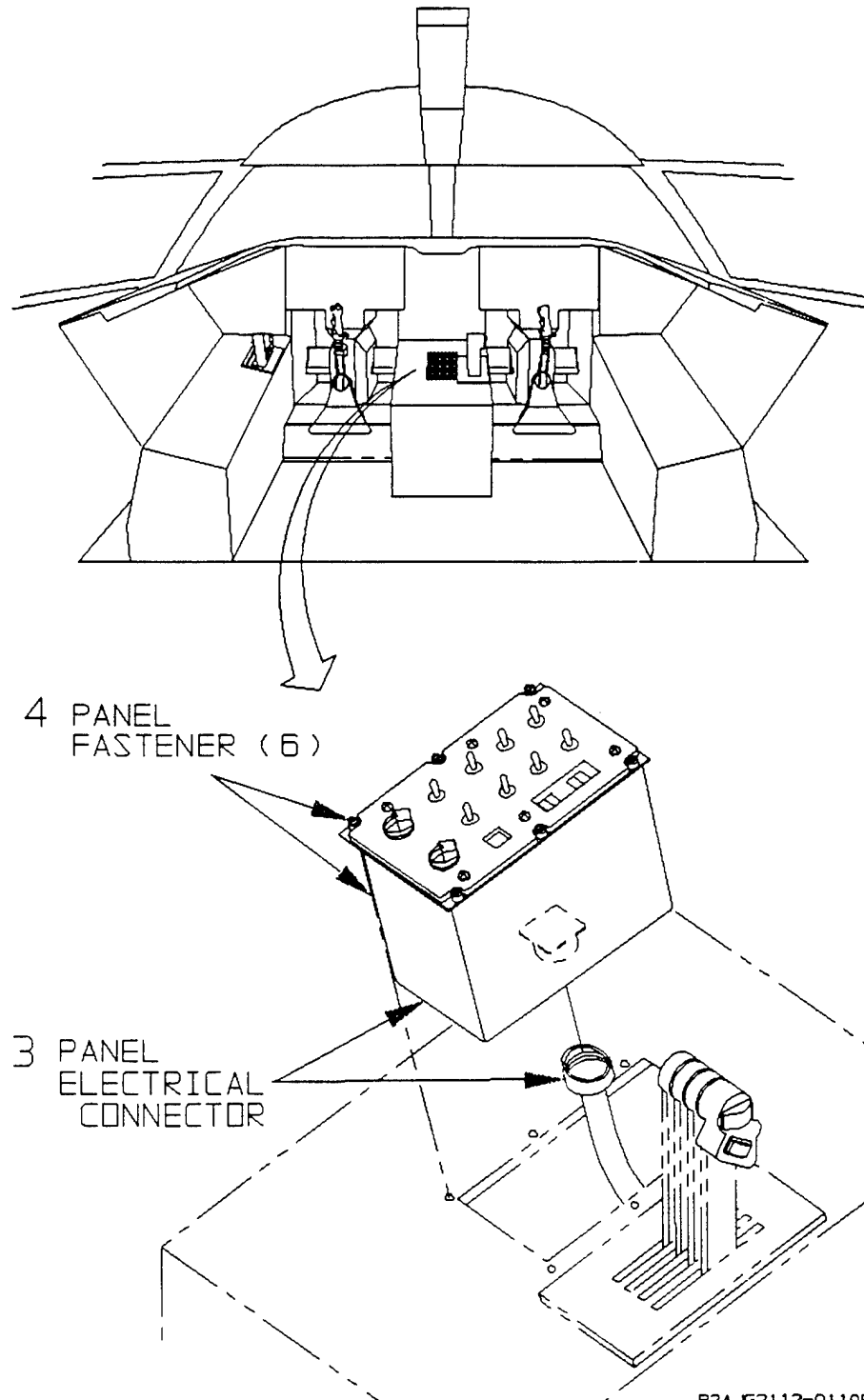
1 cautions

0 nitpicks

1 notes

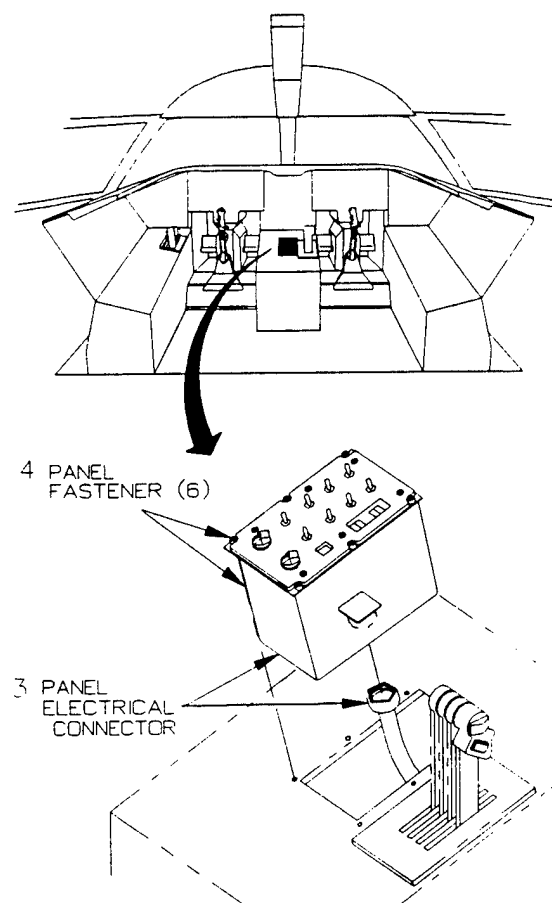
*** End of Analysis of /novell/9323/D001Q007_IGS ***

10.4.2 Output Cadkey v5.02

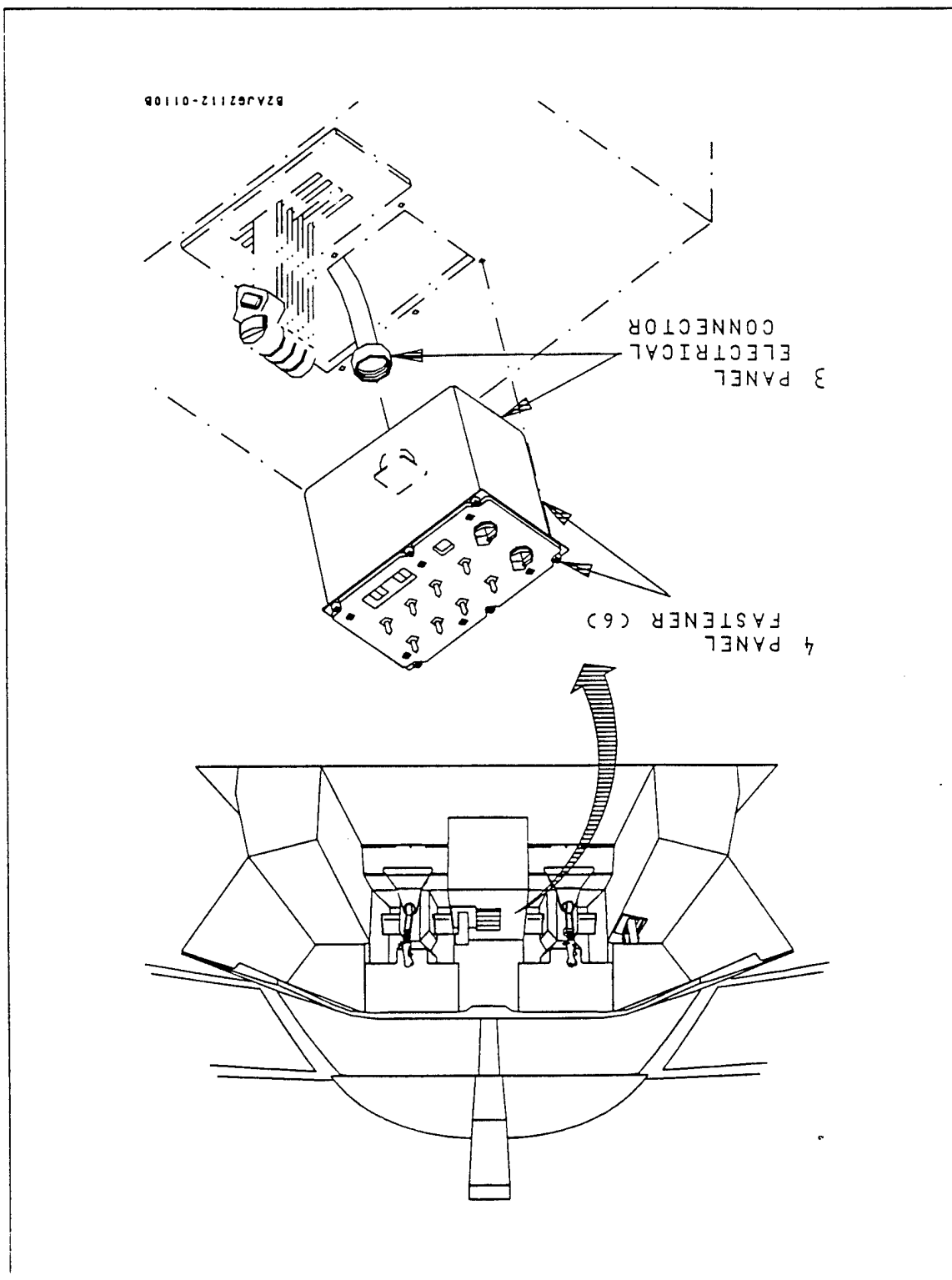


B2AJG2112-0110B

10.4.3 Output IGESView



10.4.4 Output IGESWorks



11. Appendix C - Detailed SGML Analysis

11.1 Parser Log

11.1.1 DTD Log

SGML Document Type Definition Parser
An SGML System Conforming to
International Standard ISO 8879
Standard Generalized Markup Language

Log file: '9323.LOG'
SDO File: 'ctndocl.sdo'
Namecase General is yes.
Namecase Entity is no.
Parsing DTD file: '9323.dtd'

This DTD conforms to the ISO 8879 standard

DTO file '9323.DTO' created

closing statistics:
Capacity points: 27392
Bytes of DTO file string space: 7968
SGML descriptor blocks: 2992

Document Type Definition is compliant and parsed normally.

Program status code: 0.

11.1.2 Text Log

IPA0108: *** SGML Instance Parser Log File ***
Source Document File: 'i:\9323\d001t001.'.
Job File: '9323.jbf'.
DTD File: ''.
SGML Declaration File: ''.

Reading File '9323.jbf', File Type 'JOB FILE'.

Concrete Syntax Settings In Effect For This Parse:
NAMECASE GENERAL: YES.
NAMECASE ENTITY: NO.
NAMELEN: 32.

```
SHORTTAG:          YES.
Closed '9323.jbf', File Type 'JOB FILE'.
Reading File 'i:\9323\d001t001.', File Type 'DIRECT INPUT FILE'.
--> Scanned Up To Line 100 In i:\9323\d001t001..
--> Scanned Up To Line 200 In i:\9323\d001t001..
--> Scanned Up To Line 300 In i:\9323\d001t001..
--> Scanned Up To Line 400 In i:\9323\d001t001..
--> Scanned Up To Line 500 In i:\9323\d001t001..
Closed 'i:\9323\d001t001.', File Type 'DIRECT INPUT FILE'.
Document Parsed Successfully, No Errors or Warnings.
```

11.2 Exoterica Parser

11.2.1 DTD Log

```
C:\XGML\XGMLNORM.EXE --
Error on line 466 in file entities/9323.dtd: A content model is ambiguous. For element
'TOC'. The input is 'CONTENTSENTRY'. <!-- The document prolog is in error. -->
```

11.2.2 Text Log

11.2.2.1 First Pass

```
C:\XGML\XGMLNORM.EXE --
Error on line 94 in file i:\9323\d001t001:
Unexpected start tag encountered.
The start tag is for element 'CONTENTSENTRY'.
The current element is 'TOC'.
End tags for the following elements are allowed: 'TOC'.
Start tags for the following elements are allowed: None.
Start tags for the following inclusions are allowed: 'BRK', 'HRULE',
'PGBRK'.
Text is not allowed.
The element 'CONTENTSENTRY' will be treated as an inclusion.
```

```
C:\XGML\XGMLNORM.EXE --
Error on line 106 in file i:\9323\d001t001:
Unexpected start tag encountered.
The start tag is for element 'CONTENTSENTRY'.
The current element is 'SSSN'.
End tags for the following elements are allowed: 'SSSN', 'SUBENTRY',
'CONTENTSENTRY', 'TOC'.
Start tags for the following elements are allowed: 'APPLICABIL',
```

'CHANGE', 'EMPHASIS', 'EXTREF', 'GRAPHIC', 'HCI', 'HCP', 'OCP',
'SUBENTRY', 'SUBENTRY1', 'XREF'.
Start tags for the following inclusions are allowed: 'BRK', 'HRULE',
'PGBRK'.
Text is allowed.
The element 'CONTENTSENTRY' will be treated as an inclusion.

C:\XGML\XGMLNORM.EXE --
Error on line 118 in file i:\9323\d001t001:
Unexpected start tag encountered.
The start tag is for element 'CONTENTSENTRY'.
The current element is 'SSSN'.
End tags for the following elements are allowed: 'SSSN', 'SUBENTRY',
'CONTENTSENTRY', 'SSSN', 'SUBENTRY', 'CONTENTSENTRY', 'TOC'.
Start tags for the following elements are allowed: 'APPLICABIL',
'CHANGE', 'EMPHASIS', 'EXTREF', 'GRAPHIC', 'HCI', 'HCP', 'OCP',
'SUBENTRY', 'SUBENTRY1', 'XREF'.
Start tags for the following inclusions are allowed: 'BRK', 'HRULE',
'PGBRK'.
Text is allowed.
The element 'CONTENTSENTRY' will be treated as an inclusion.

C:\XGML\XGMLNORM.EXE --
Error on line 129 in file i:\9323\d001t001:
Unexpected start tag encountered.
The start tag is for element 'CONTENTSENTRY'.
The current element is 'SSSN'.
End tags for the following elements are allowed: 'SSSN', 'SUBENTRY',
'CONTENTSENTRY', 'SSSN', 'SUBENTRY', 'CONTENTSENTRY', 'SSSN',
'SUBENTRY', 'CONTENTSENTRY', 'TOC'.
Start tags for the following elements are allowed: 'APPLICABIL',
'CHANGE', 'EMPHASIS', 'EXTREF', 'GRAPHIC', 'HCI', 'HCP', 'OCP',
'SUBENTRY', 'SUBENTRY1', 'XREF'.
Start tags for the following inclusions are allowed: 'BRK', 'HRULE',
'PGBRK'.
Text is allowed.
The element 'CONTENTSENTRY' will be treated as an inclusion.

C:\XGML\XGMLNORM.EXE --
Error on line 140 in file i:\9323\d001t001:
Unexpected start tag encountered.
The start tag is for element 'CONTENTSENTRY'.
The current element is 'SSSN'.
End tags for the following elements are allowed: 'SSSN', 'SUBENTRY',
'CONTENTSENTRY', 'SSSN', 'SUBENTRY', 'CONTENTSENTRY', 'SSSN',
'SUBENTRY', 'CONTENTSENTRY', 'SSSN', 'SUBENTRY', 'CONTENTSENTRY', 'TOC'.
Start tags for the following elements are allowed: 'APPLICABIL',
'CHANGE', 'EMPHASIS', 'EXTREF', 'GRAPHIC', 'HCI', 'HCP', 'OCP',
'SUBENTRY', 'SUBENTRY1', 'XREF'.

Start tags for the following inclusions are allowed: 'BRK', 'HRULE',
'PGBRK'.

Text is allowed.

The element 'CONTENTSEENTRY' will be treated as an inclusion.

11.2.2.2 Second Pass

C:\XGML\XGMLNORM.EXE --

Error on line 68 in file i:\9323\d001t001:

Unexpected start tag encountered.

The start tag is for element 'TABLE'.

The current element is 'SSSN'.

End tags for the following elements are allowed: 'SSSN', 'SUBENTRY',
'CONTENTSEENTRY', 'TOC'.

Start tags for the following elements are allowed: 'APPLICABIL',
'CHANGE', 'CONTENTSEENTRY', 'EMPHASIS', 'EXTREF', 'GRAPHIC', 'HCI',
'HCP', 'OCP', 'SUBENTRY', 'SUBENTRY1', 'XREF'.

Start tags for the following inclusions are allowed: 'BRK', 'HRULE',
'PGBRK'.

Text is allowed.

The element 'TABLE' will be treated as an inclusion.

12. Appendix D - Detailed Raster Analysis

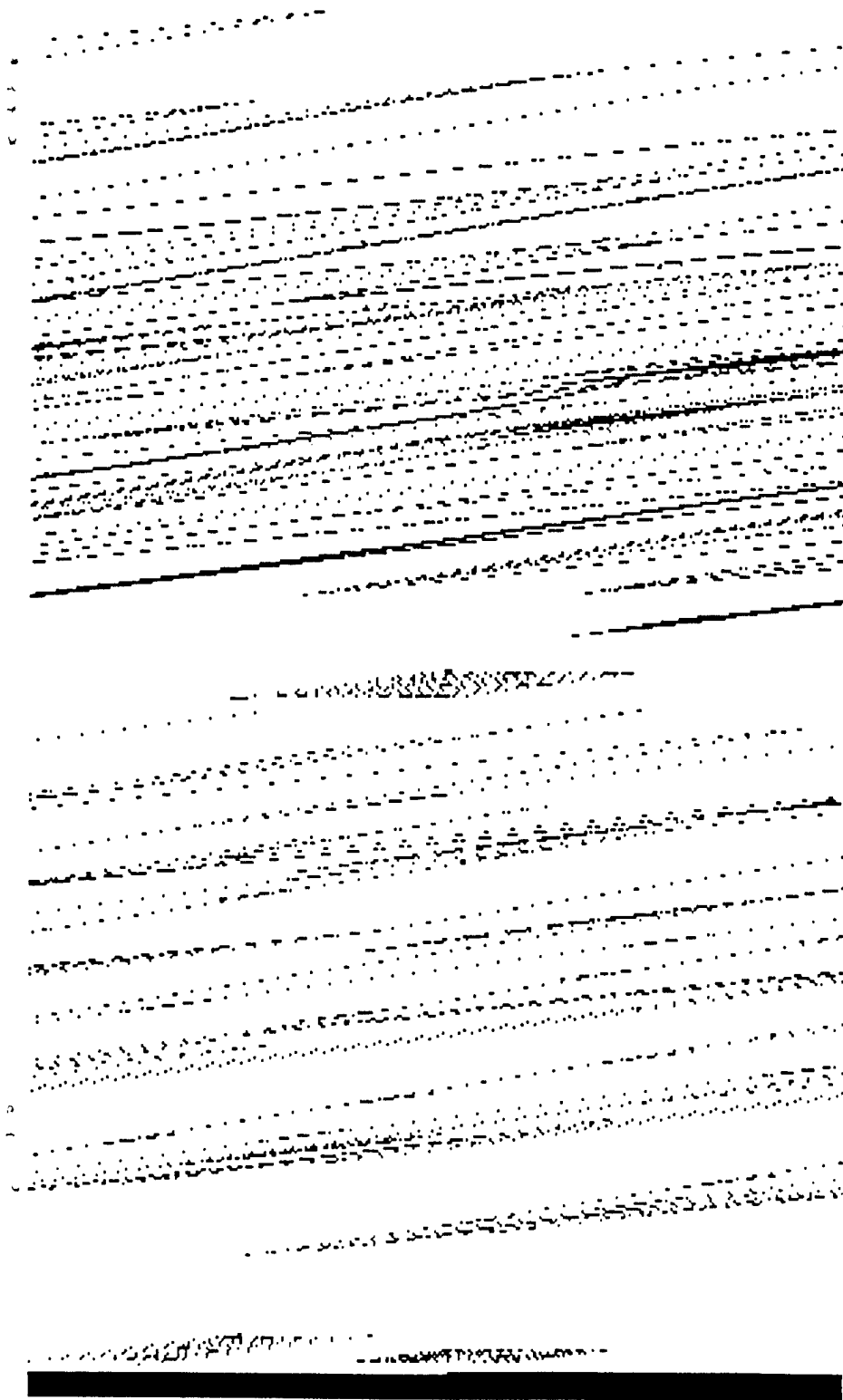
12.1 File D001R009

12.1.1 Error Log validg4

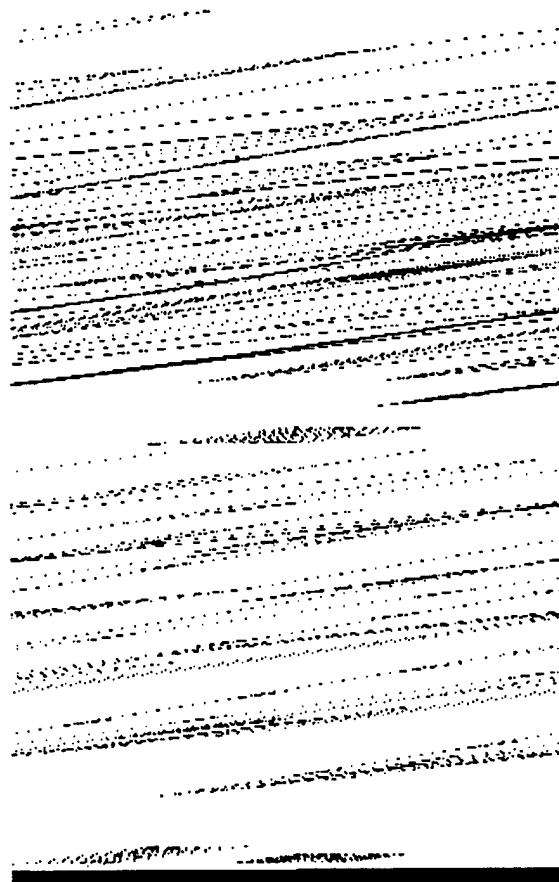
density = 300
path length = 312
scan lines = 500
bit format = MSB

error reading input file

12.1.2 Output g42tiff/IslandPaint



12.1.3 Output IGESView



13. Appendix E - Detailed CGM Analysis

13.1 File D001C008

13.1.1 Parser Log MetaCheck

MetaCheck Version 2.05 -- CGM/MIL-D-28003 Conformance Analyzer
Copyright 1988-91 CGM Technology Software
Execution Date: 03/17/93 Time: 07:58:57

Metafile Examined : i:\9323\c008.cgm

Pictures Examined : All

Elements Examined : All

Bytes Examined : All

===== Trace Report =====

Tracing not selected.

===== CGM Conformance Violation Report =====

No Errors Detected

===== CALS CGM Profile (MIL-D-28003) Report =====

No profile discrepancies detected.

===== Conformance Summary Report =====

MetaCheck Version 2.05 -- CGM/MIL-D-28003 Conformance Analyzer
Copyright 1988-91 CGM Technology Software
Execution Date: 03/17/93 Time: 07:59:03

Name of CGM under test: i:\9323\c008.cgm

Encoding : Binary

Pictures Examined : All

Elements Examined : All

Bytes Examined : All

BEGIN METAFILE string : "0103D.cgm"

METAFILE DESCRIPTION : "NORTHROP B2 ITDS GEF, MIL-D-28003/BASIC-1"

Picture 1 starts at octet offset 154; string contains: "Picture 1"

Private values encountered in CGM

Conformance Summary : This file conforms to the CGM specification.

This file meets the CALS CGM Profile (MIL-D-28003).

Summary of Testing Performed and Errors Found:

1 Pictures Tested
2192 Elements Tested
48616 Octets Tested

```
=====
|      No Errors Were Detected      |
=====
```

===== End of Conformance Report =====

13.1.2 validegmn Log

Analysis for file c008.cgm using table table

ERROR: illegal in this state (2), std B

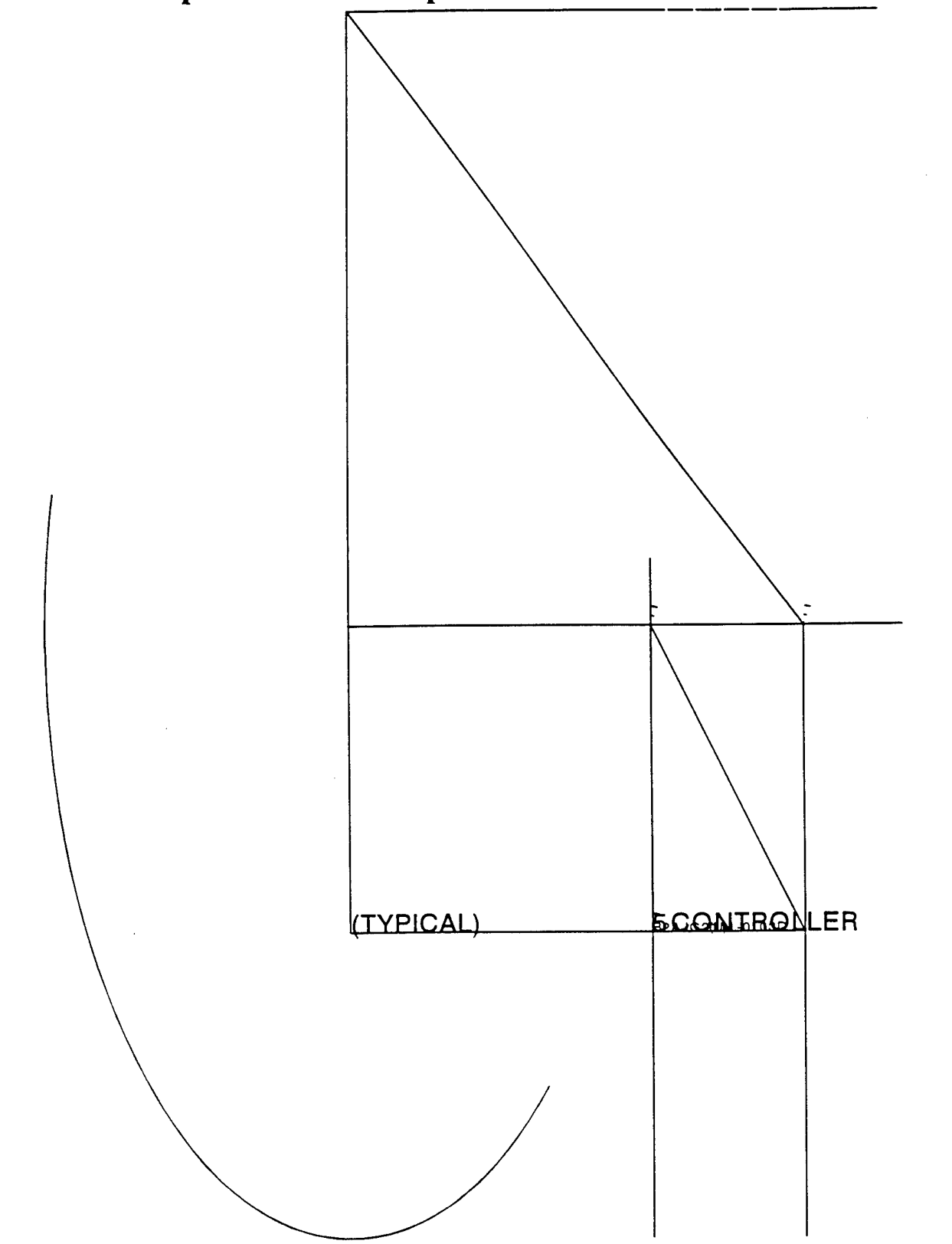
ERROR: required precursor (0, 4) not yet seen

(14.1, 0) (3, 6, 2) Clip Indicator OFF

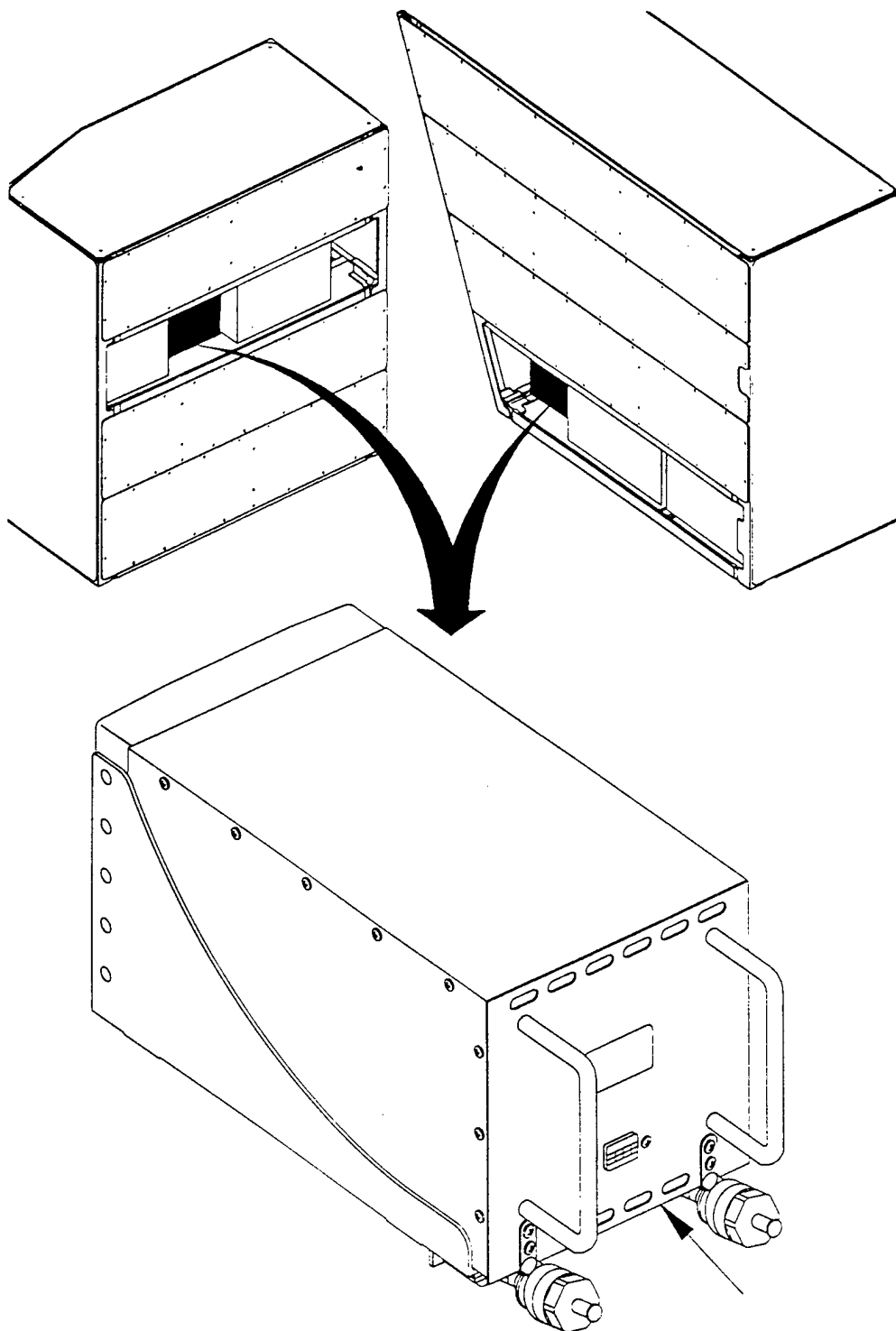
(0, 1) occurred 1 time
(0, 2) occurred 1 time
(0, 3) occurred 1 time
(0, 4) occurred 1 time
(0, 5) occurred 1 time
(1, 1) occurred 1 time
(1, 2) occurred 1 time
(1, 3) occurred 1 time
(1, 4) occurred 1 time
(1, 5) occurred 1 time
(1, 6) occurred 1 time
(1, 7) occurred 1 time
(1, 8) occurred 1 time
(1, 9) occurred 1 time
(1, 10) occurred 1 time
(1, 11) occurred 1 time
(1, 12) occurred 1 time
(1, 13) occurred 1 time
(2, 2) occurred 1 time
(2, 6) occurred 1 time
(2, 7) occurred 1 time
(3, 2) occurred 1 time
(3, 6) occurred 1 time

(3, 6) occurred illegally 1 time
(4, 1) occurred 624 times
(4, 4) occurred 5 times
(4, 7) occurred 5 times
(4, 15) occurred 20 times
(4, 17) occurred 165 times
(4, 18) occurred 565 times
(5, 2) occurred 99 times
(5, 3) occurred 99 times
(5, 4) occurred 99 times
(5, 10) occurred 1 time
(5, 12) occurred 3 times
(5, 13) occurred 3 times
(5, 14) occurred 1 time
(5, 15) occurred 4 times
(5, 16) occurred 4 times
(5, 17) occurred 1 time
(5, 18) occurred 1 time
(5, 22) occurred 95 times
(5, 23) occurred 2 times
(5, 27) occurred 93 times
(5, 28) occurred 93 times
(5, 29) occurred 93 times
(5, 30) occurred 95 times
(5, 34) occurred 1 time

13.1.3 Output Harvard Graphics



13.1.4 Output cgm2draw/IslandDraw



13.1.5 Output CADleaf

